

University of Groningen

## Adaptive antimicrobial nanocarriers for the control of infectious biofilms

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## **Stellingen**

behorend bij het proefschrift

### **“Adaptive Antimicrobial Nanocarriers for the Control of Infectious Biofilms”**

Yong Liu

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1. Surface-adaptive nanocarriers are able to penetrate into and accumulate in biofilms through electrostatic attractions. (This thesis)
2. The tailored design of nanocarriers enables drug delivery and release into infectious bacterial microenvironments in an “on-demand” manner. (This thesis)
3. The conjugation of antimicrobials into nanocarriers can effectively prevent drug leakage and enhance their antimicrobial efficacy. (This thesis)
4. Antimicrobial photodynamic therapy provides an effective way to eradicate multidrug-resistant pathogens. (This thesis)
5. With the assistance of nanocarriers, antimicrobials can be selectively delivered into bacterial biofilms. (This thesis)
6. Application of antimicrobial nanocarriers in murine models has been successful, but the clinical effectiveness of such nanocarriers is yet to be revealed. (This thesis)
7. Life is like riding a bicycle. To keep your balance, you must keep moving. (Albert Einstein)
8. Kindness in words creates confidence. Kindness in thinking creates profoundness. Kindness in giving creates love. (Lao Tzu)
9. The aim of the wise is not to secure pleasure, but to avoid pain. (Aristoteles)
10. Life is like a box of chocolates, you never know what you are going to get. (Forrest Gump)