# ANTIMICROBIAL POLYMERS:
# PEPTIDE-MIMETIC DESIGN AND MECHANISM OF ACTION

by

Edmund Francis Palermo

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Doctoral Committee:

Assistant Professor Kenichi Kuroda, Chair
Professor Richard M. Laine
Professor Ayyalusamy Ramamoorthy
Assistant Professor Anne J. McNeil

## DEDICATION

To Gabrielle C. Todd, for her support, encouragement, and helpful discussions

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## LIST OF ABBREVIATIONS

| | |
|---|---|
| AEMA | aminoethylmethacrylate |
| AIBN | azo-bis-isobutyronitrile |
| AMP | Antimicrobial Peptide |
| BMA | butylmethacrylate |
| CL | cardiolipin |
| CMC | Critical Micelle Concentration |
| CTAB | cetyltrimethylammonium bromide |
| DDP | dodecylphosphate |
| DMAEMA | N,N-dimethylaminoethylmethacrylate |
| DOPG | 1,2-dioleoyl-*sn*-glycero-3-[phospho-*rac*-(1-glycerol)] |
| DP | degree of polymerization |
| EMA | ethylmethacrylate |
| FITC | fluorescein isothiocyanate |
| $HC_{50}$ | Hemolytic Concentration |
| HDP | Host Defense Peptide |
| $IC_{50}$ | Cytotoxic Concentration |
| $K_D$ | Dissociation constant |
| Lysl-DOPG | 1,2-dioleoyl-*sn*-glycero-3-[phospho-*rac*-(3-lysyl(1-glycerol))] |
| log*P* | water-octanol partition coefficient |
| MALDI-TOF-MS | Matrix-Assisted Laser Desorption Ionization Time of Flight Mass Spectroscopy |
| MBC | Minimum Bactericidal Concentration |
| MIC | Minimum Inhibitory Concentration |
| MMA | methylmethacrylate |
| MMP | methylmercaptopropionate |
| MW | molecular weight |
| NMR | Nuclear Magnetic Resonance |
| PBS | phosphate buffered saline |
| PEG | polyethylene glycol |
| PI | propidium iodide |
| POPC | 1-palmitoyl-2-oleoyl-*sn*-glycero-3-phosphocholine |
| POPE | 1-palmitoyl-2-oleoyl-*sn*-glycero-3-phosphoethanolamine |
| POPG | 1-palmitoyl-2-oleoyl-*sn*-glycero-3-phospho-(1'-*syn*-glycerol) |
| QAS | quaternary ammonium salt |
| RBC | Red Blood Cell |
| SRB | sulforhodamine B |
| TFA | trifluoroacetic acid |