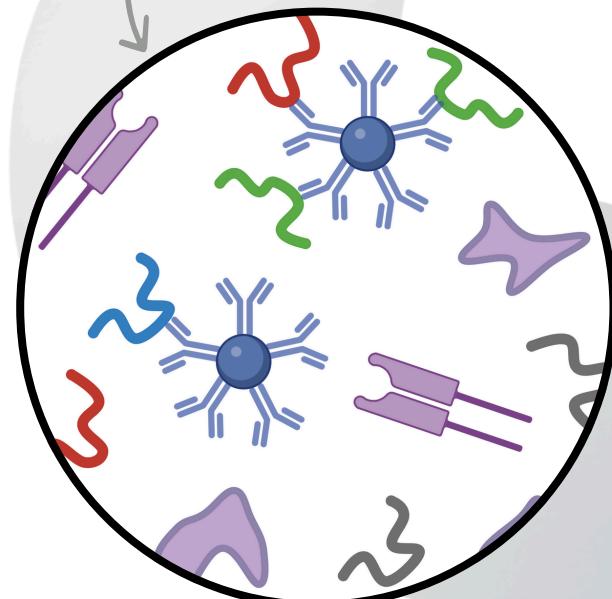
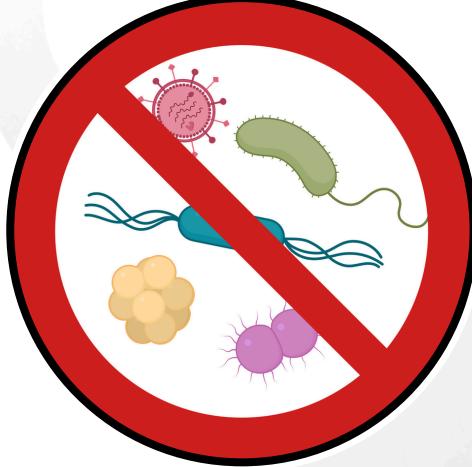


# Rise of Antimicrobial Resistance

Misuse of antibiotics  $\Rightarrow$  resistant infections  
 $\approx 39$  M deaths forecast by 2050

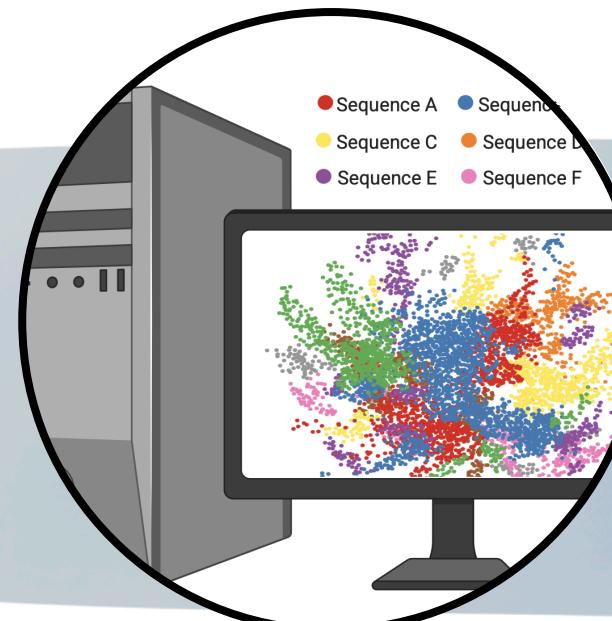


## Antimicrobial Peptides

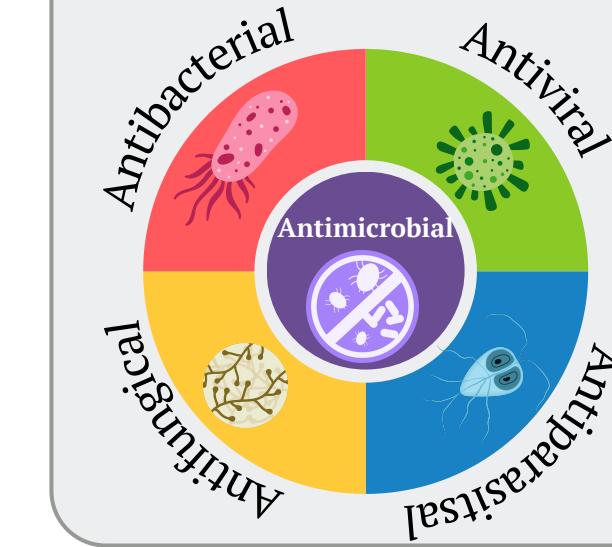
Potential alternative for antimicrobial drug design, yet costly and time-consuming

More efficient and successful identification of AMPs with classification models, but still data and evaluation gaps

## Artificial Intelligence



$\approx 80.000$  peptide sequences compiled from 27 public repositories



Multilabel annotations for the main AMPs categories

## ESCAPE Dataset



Benchmarking 7 AMP classifiers, including our baseline, using **mAP** and **F1-score** metrics

## ESCAPE Benchmark