

iGEM

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Teams

Team 1 (Wiki):

- Team Name: Pyomancer
- Organization: IIT Roorkee
- Classification: Therapeutics
- Problem: Hospital Acquired Infections from multi-drug resistant bacteria
- Solution: Antibacterial fusion protein
- Summary: Design of novel antimicrobial protein complexes made by fusion of pyocins and bacteriophage tail fiber proteins
- BioParts:

| Name | Type | Description | Length |
|--------------|----------------|---|--------|
| BBa_K3564001 | Protein Domain | Pseudomonas aeruginosa PAO1 R2 Pyocin Gene Cluster (tail fiber deleted) | 12732 |
| BBa_K3564102 | Coding | Engineered Pyocin targeting Acinetobacter baumannii (with AP22 phage fusion tail fiber) | 14823 |
| BBa_K3564002 | Coding | Pyocin-AP22 phage fusion tail fiber | 2085 |

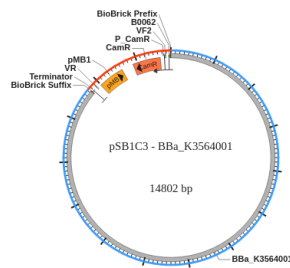


Figure 1: Pyromancer Vector Map

Team 2 (Wiki):

- Team Name: FRaPPe
- Organization: IISER-Berhampur
- Classification: Foundational Advance
- Problem: Lack of antivirals or vaccines against Dengue Virus
- Solution: FRET based high throughput screening method
- Summary: FRaPPe system when cloned and transfected will report which peptides work best in interrupting host-virus PPIs
- BioParts:

| Name | Type | Description | Length |
|--------------|---------|--|--------|
| BBa_K3646000 | Coding | DENV-NS5 CDS | 2715 |
| BBa_K3646002 | Coding | enhancedYFP CDS | 717 |
| BBa_K3646004 | Coding | FRB CDS (FKBP-Rapamycin Binding Protein) | 279 |
| BBa_K3646006 | Coding | hSTAT2 CDS | 2568 |
| BBa_K3646007 | Coding | enhancedCFP CDS | 717 |
| BBa_K3646008 | Coding | FKBP CDS (FK506 Binding Protein) | 324 |
| BBa_K3646009 | Project | FRaPPeT3:hSTAT2_CID_FRET | 4263 |
| BBa_K3646010 | Project | FRaPPeT2:NS-5_CID_FRET | 4365 |