

## SUPPLEMENTARY MATERIALS

**Table S 1 Effect of PA phage SN on the *P. aeruginosa* strain HER-1018 population in low salinity PW using Wilcoxon sign-rank test (N=26).**

### Descriptive Statistics

	N	Min	Q1	Median	Q3	Max
<i>P. aeruginosa</i> Treatment	26	1.57866E-4	0.00133	0.00204	0.0023	0.00439
" <i>P. aeruginosa</i> "	26	0.0111	0.01679	0.08349	0.09177	0.10527

### Ranks

		N	Mean Rank	Sum Rank
<i>"P. aeruginosa"</i> - Phage treatment	Positive Ranks	26	13.5	351
	Negative Ranks	0	0	0

### Test Statistics

	W	Z	Exact Prob> W	Asymp. Prob> W
	0	-4.44465	2.98023E-8	8.80367E-6

Null Hypothesis: Median1 = Median2

Alternative Hypothesis: Median1 <> Median2

At the 0.05 level, the two distributions are significantly different.

*P. aeruginosa*'s population reduction assay was conducted by the addition of 500 µL of  $1.2 \times 10^9$  PFU/mL of SN phage stock and co-incubation with the host in PW for 24 hours at 37°C.

**Table S 2 Effect of BM phage Slash on the *B. megaterium* sp. population in low salinity PW using t-test for two independent samples (N=19).**

### Descriptive Statistics

		N	Mean	SD	SEM	Median
<i>B. megaterium</i>		19	0.62382	0.62867	0.14423	0.442
Slash treatment		19	0.25905	0.39137	0.08979	0.045
	Difference	19	0.36476		0.16989	0.123
	Overall	38	0.44143	0.54859	0.08899	0.0595

Standard Error of Mean (SEM) of difference is computed under the condition that equal variance is assumed.

### t-Test Statistics

	t Statistic	DF	Prob> t
Equal Variance Assumed	2.14706	36	0.0386
Equal Variance NOT Assumed (Welch Correction)	2.14706	30.1301	0.03996

Null Hypothesis: mean1-mean2 = 0

Alternative Hypothesis: mean1-mean2 <> 0

At 0.05 level, when equal variance is assumed, Mean1 - Mean2 is significantly different from 0

At 0.05 level, when equal variance is NOT assumed, Mean1 - Mean2 is significantly different from 0

*B. megaterium*'s population reduction assay was conducted by the addition of 500 µL of  $1.6 \times 10^9$  PFU/mL of Slash phage stock and co-incubation with the host in PW for 24 hours at 37°C.

**Table S 3 Effect of BM phage Palmer on the *B. megaterium* sp. population in low salinity PW using t-test for two independent samples (N=19).**

**Descriptive Statistics**

		N	Mean	SD	SEM	Median
<i>B. megaterium</i>		19	0.62382	0.62867	0.14423	0.442
Palmer treatment		19	0.15409	0.20039	0.04597	0.077
	Difference	19	0.46973		0.15138	0.094
	Overall	38	0.38895	0.51813	0.08405	0.1105

Standard Error of Mean (SEM) of difference is computed under the condition that equal variance is assumed.

**t-Test Statistics**

	t Statistic	DF	Prob> t
Equal Variance Assumed	3.10306	36	0.00372
Equal Variance NOT Assumed (Welch Correction)	3.10306	21.62034	0.00526

Null Hypothesis: mean1-mean2 = 0

Alternative Hypothesis: mean1-mean2 <> 0

**At 0.05 level, when equal variance is assumed, Mean1 - Mean2 is significantly different from 0**

**At 0.05 level, when equal variance is NOT assumed, Mean1 - Mean2 is significantly different from 0**

*B. megaterium*'s population reduction assay was conducted by the addition of 500 µL of 2.7x10<sup>9</sup> PFU/mL of Palmer phage stock and co-incubation with the host in PW for 24 hours at 37°C.

**Table S 4 Effect of BM phages cocktail on the *B. megaterium* sp. population in low salinity PW using t-test for two independent samples (N=4).**

**Descriptive Statistics**

		N	Mean	SD	SEM	Median
<i>B. megaterium</i>		4	4.175	2.24687	1.12344	4.665
Phage cocktail		4	0.97	1.27389	0.63695	0.56
	Difference	4	3.205		1.29144	2.785
	Overall	8	2.5725	2.40707	0.85103	2.03

Standard Error of Mean (SEM) of difference is computed under the condition that equal variance is assumed.

**t-Test Statistics**

	t Statistic	DF	Prob> t
Equal Variance Assumed	2.48173	6	0.04769
Equal Variance NOT Assumed (Welch Correction)	2.48173	4.74806	0.05832

Null Hypothesis: mean1-mean2 = 0

Alternative Hypothesis: mean1-mean2 <> 0

**At 0.05 level, when equal variance is assumed, Mean1 - Mean2 is significantly different from 0**

**At 0.05 level, when equal variance is NOT assumed, Mean1 - Mean2 is NOT significantly different from 0**

*B. megaterium*'s population reduction assay was conducted by the addition of 500 µL of 1.6x10<sup>9</sup> PFU/mL of Slash phage and 2.7x10<sup>9</sup> PFU/mL of Palmer phage stock and co-incubation with the host in PW for 24 hours at 37°C.