

Correlation recap, SW platelet data

```
> platelet = read.table(file="D:\\stat141\\platelet.dat", header = T) #SW p.550
```

```
> cor.test(BP,PC)
```

Pearson's product-moment correlation

data: BP and PC

t = 4.3071, df = 36, p-value = 0.0001219

alternative hypothesis: true correlation is not equal to 0

95 percent confidence interval: 0.3238485 0.7609758

sample estimates: cor 0.5831581

*usual product moment corr*

```
> cor.test(BP,PC, method="spearman")
```

Spearman's rank correlation rho

data: BP and PC

S = 3324, p-value = 2.696e-05

alternative hypothesis:

true rho is not equal to 0

sample estimates: rho 0.636314

```
> cor(BP,PC, method="spearman")
```

```
[1] 0.636314
```

*rank corr*

```
> cor.test(rank(BP),rank(PC))
```

Pearson's product-moment correlation

data: rank(BP) and rank(PC)

t = 4.9491, df = 36, p-value = 1.755e-05

alternative hypothesis:

true correlation is not equal to 0

95 percent confidence interval:

0.397487 0.794401

sample estimates: cor 0.636314

*transform to ranks*

*correlation of ranks*

*(transform)*

*also get "approx" CI*