

Practicing with 3D Landmark Data

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Put what you have learned into action! lets do some analyses of the 3D scallop shape data built into the geomorph package

Loading Packages and Scripts

```
library(geomorph)
```

Import Data

```
data(scallops)
```

Run Procrustes superimposition

```
Y.gpa <- gpagen(A = scallops$coorddata,  
               curves = scallops$curvslide,  
               surfaces = scallops$surfslide)
```

Exercise

1. Carry out a PCA and plot the results
2. Plot 3D representatives of the shape change along PC axes 1 and 2 using the “vector” method in the `plotRefToTarget` function
3. Test for allometry: does size (centroid size) predict shape?