MSA Heatmap

Natalie Ogg A91030809

```
library(bio3d)
  alignment <- read.fasta("new_msa_alignment.clw.fst")</pre>
  seqidentity(alignment)
             Homo_sapiens Stoat Brown_bear Snow_leopard Canada_lynx Leopard
Homo_sapiens
                     1.000 0.951
                                       0.954
                                                    0.966
                                                                 0.966
                                                                         0.966
Stoat
                     0.951 1.000
                                       0.966
                                                    0.968
                                                                 0.968
                                                                         0.968
Brown_bear
                     0.954 0.966
                                       1.000
                                                    0.983
                                                                 0.983
                                                                         0.983
Snow_leopard
                     0.966 0.968
                                       0.983
                                                    1.000
                                                                 1.000
                                                                         1.000
Canada_lynx
                     0.966 0.968
                                       0.983
                                                    1.000
                                                                 1.000
                                                                         1.000
Leopard
                     0.966 0.968
                                       0.983
                                                    1.000
                                                                 1.000
                                                                         1.000
                     0.966 0.968
                                       0.983
                                                    1.000
                                                                 1.000
                                                                         1.000
Jaguarundi
             Jaguarundi
                   0.966
Homo_sapiens
Stoat
                   0.968
Brown_bear
                   0.983
Snow_leopard
                   1.000
Canada_lynx
                   1.000
Leopard
                   1.000
Jaguarundi
                   1.000
  identity_matrix <- seqidentity(alignment)</pre>
  heatmap(identity_matrix, Rowv = NA, Colv = NA, scale = "none", main = "Sequence Identity H
```

Sequence Identity Heatmap

