

Rhodococcus rhodochrous (Oil-degrading bacteria)

Fun fact: A type of bacteria added to soil to improve plant growth

Replication protein: helps copy DNA, the basis for inheritance

```
tgcaggtcgatccga   ccccgctgctgatctt  
cgcgatcacatcagc   cctcgagcgcgctcga  
gccgatccgccatcc   gcacccaactcctgc
```

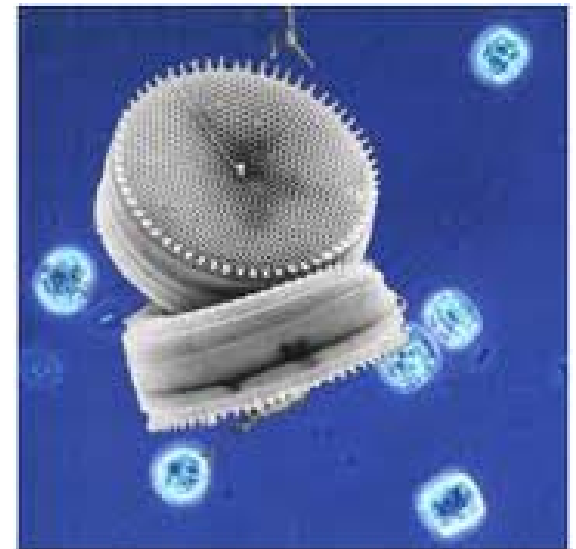


Thalassiosira pseudonana (Marine algae)

Fun fact: Chosen as the first microscopic plant-like organism living in the ocean to have its genome sequenced

Unknown protein

```
atgtctccaccacga  taccacgatgtcggg  
gtagaacaacatcaa  cgacaacatggtaca  
ccatcaacgtccgac  caacggcgagaaaac  
caactcgggtgcatcc  gccgaacacgccggt
```



Saccharomyces cerevisiae

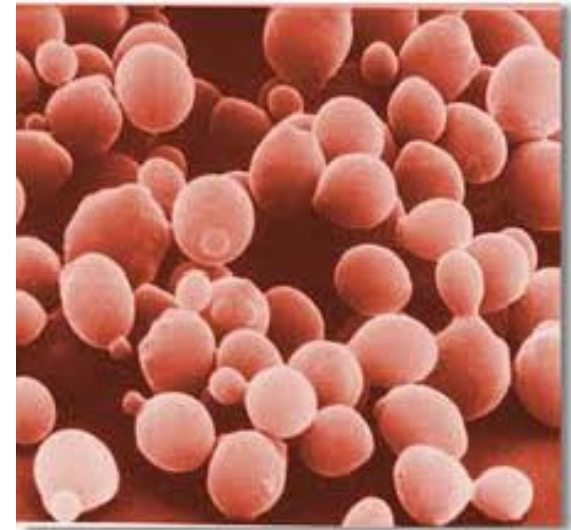
(Beer yeast)

Fun fact: Commonly known as "baker's yeast" or "brewer's yeast"

Alcohol dehydrogenase gene:

helps detoxify alcohol in the human body

```
cgatTTTTTctaaa  ccgtggaatatttcg
gatatccttttgttg  tttccgggtgtacaa
tatggacttcctctt  ttctggcaaccaaac
ccatacatcgggatt  cctataataccttcg
```



Lactococcus lactis (Cheese-making bacteria)

Fun fact: Used extensively in the production of buttermilk and cheese.

Unknown gene

```
ggcgtgcctaataca  tgcaagttgagcgct  
gaaggttggtacttg  taccaactggatgag  
cagcgaacgggtgag  taacgcgtggggaat  
ctgcctttgagcggg  ggacaacatttgga
```



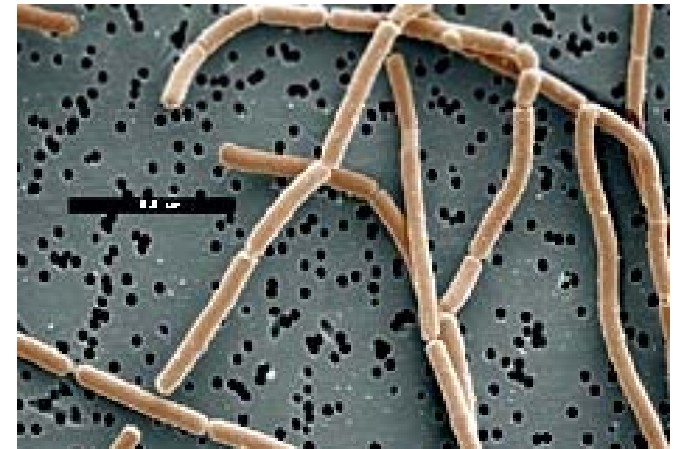
Lactobacillus delbrueckii sub-species bulgaricus (Yogurt bacterium)

Fun fact: Is one of several bacteria used to make yogurt.

Unknown gene

ttgttcgatttagaa
ttcaacgctg aaatg
gaagtatcctataat
accaagcccgtctcc

aaattctgggatagc
cgggccgaatttaac
gcctggttcaaaaac
ttcaacaaggacacc



Homo sapiens (Human)

Fun fact: Humans have approximately 400 genes that make olfactory receptors, which contribute to a person's sense of smell

Olfactory receptor

atgctgggtccagct
gaaaccctgcctcc
tcctccttgtgggt
tcttcacatctttgg

tacaaccacacaatg
gaaaccctgcctcc
atcccaggactgcaa
ctggctatctcactg



Fragaria x ananassa (Strawberry)

Fun fact: Strawberries have up to eight copies of each chromosome (octoploid genome). Humans have two copies of each chromosome (diploid genome)

Gene involved in ripening

atgggaggacacaat	ctagtcttgattatc
ttttcggtatTTTTG	ttatcttcctcagca
tatgcaagtagagtc	gcacagtttttagct
cctggtgactttgat	gtgacaagtccgaaa



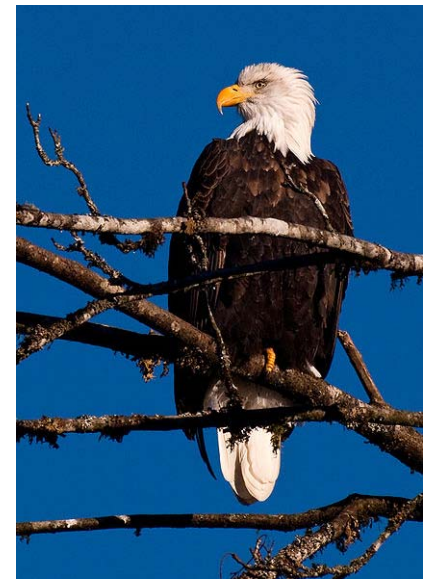
Haliaeetus leucocephalus (Bald eagle)

Fun fact: Generally lives forty-five to fifty years in captivity and twenty-five years in the wild.

Unknown gene

tggaagtcacgtagc
ccatgagggtgagta
tgtttcaagtttctt
cataatatagccctc

ctacgaaggcagttg
atacaatgattcctg
tatataggtatgagc
ggccaatgtgtaggt



Ornithorhynchus anatinus (Duck-Billed Platypus)

Fun fact: The male platypus has venomous stingers on the heels of their rear feet.

Platypus venom gene

atgaggctcgcttac
gtggccgtgttgttc
tcagccaaaccata
caagcctgctgggcc

cttctcctactgctt
caagctggggggcgga
atgttcttcgaaatg
cacagcggcgtctgc



Domestic Dog (*Canis familiaris*)

Fun fact: The dog is a domesticated form of the gray wolf.

Muscle development gene

atgcagagactgcaa	atctgtgtttatatt
tacctgtttgtgctg	attgttgctggccca
gtcgatctaagtgag	aacagtgagcaaaaa
gaaaatgtggaaaag	gaggggctgtgtaat



Domestic Cat (*Felis catus*)

Fun fact: About 250 heritable genetic disorders have been identified in cats.

Tyrosinase gene: mutations in this gene produce the Siamese and Burmese coat colors

```
gattggaggagtaca atagccgtcaggctt
tatgtgatggaactc cagagggaccattac
tgcgcaatcccggaa accatgacaaagcca
ggacccaaggctcc  cctcctctgctgatg
```



Siamese



Burmese

Zea mays (corn)

Fun fact: One kernel of corn can produce a corn plant with a new ear of corn with 800 kernels

Root protein

cctggaactcgctca
aataccaagctcgtg
gtcctcgtgagcgtt

ctggcaatggctacc
gcccttggcttggcc
gggttctccgatgca

