

- Pickles are a way to dump out python data structures as files, allowing easy transfer of data between scripts
- ```
import cPickle as pic
data = pic.load(open("filename.pkl", "rb"))
print data
```
- We are giving you 3 pickles (<http://kampmannlab.ucsf.edu/pubs-2017>):
  - allele\_dic.pkl - contains a dictionary where:
    - key = barcode nucleotide sequence
    - value = residuenumber\_codon  
(residuenumber is in protein space, codon is in nucleotides!)
  - translate.pkl - contains a dictionary where:
    - key = codon
    - value = amino acid
  - aminotonumber.pkl - contains a dictionary where:
    - key = amino acid
    - value = number  
(useful for plotting)
- Many barcodes can map to the same codon, and (for some amino acids) many codons can map to the same amino acid
- each group will present results (visualizations, quantifications, biases in library, etc) next Monday

