**Genomic challenge**

Phase 1 – feature extraction:

* Function [all\_features] = extract\_features(all\_sequences)
* Function [bin\_features] = bin\_feat(features\_mat)

Phase 2 – feature selection:

* Function [selected\_feat, feat\_feat\_corr, feat\_label\_corr] = feature\_selection(bin\_features, labels)

Phase 3 – train a regression model

* Function [model, predictions, evaluations] = train\_model(features, labels, model\_type)

Phase 4 – evaluations and comparing models

* Function [best\_model] = compare\_models(models, features, labels)

Phase 5 – predict on unknown samples