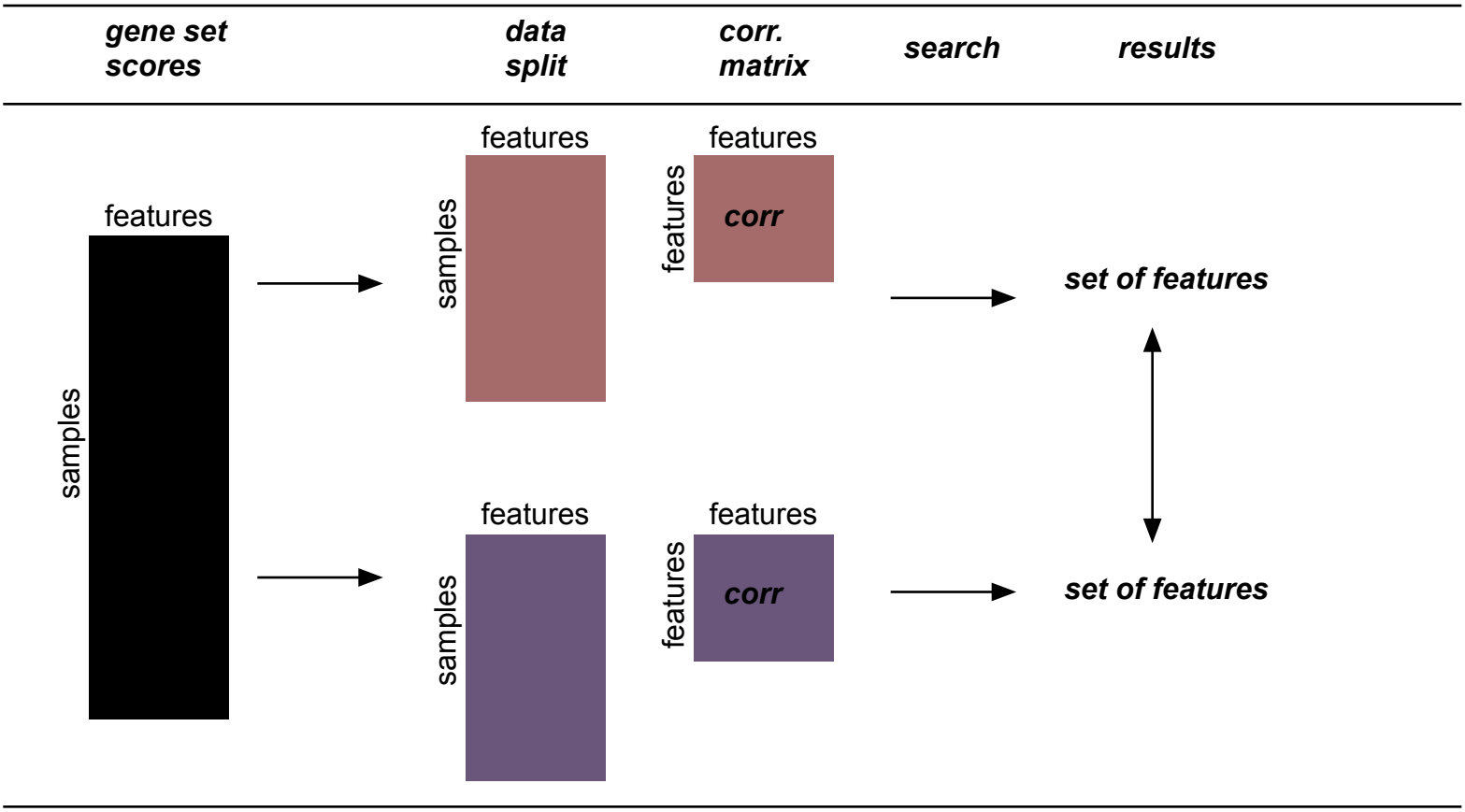
Feature selection via minimization of the average inter-set correlation.
A hill climbing implementation.



Algorithm:
Repeat *Reps* number of times. When done, return *k* items most often selected.

parameters
I : list of all features
D : data matrix, features in columns
M : correlation matrix of data
k : number of desired features
iter : number of iterations

init the result set
resultSet = sample *k* items from *I*

for 1 to *iter*:
  x = sample feature that is not already selected,
    with probability proportional to distance from result set.
  i = sample element in *resultSet*,
    probabiltiy proportional to average correlation with other result set elements.
  try: replace element *i* in *resultSet* with x, compute average inter-set correlation
    if the inter-set correlation has decreased, then keep *x*, otherwise discard *x*.