# Towards the GWAS pipeline: (i) revising the steps

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## the stand-alone GWAS scripts

- Run GWAS programmatically
  - gwas\_rrblup.R
  - gwas\_statgengwas.R



## step 1 - getting the data

- 1.get\_data.sh
  - Download the data
  - Prepare the data





#### step 2 - filter the data

- 2.steps\_filtering.sh
  - Filter genotype data:
    - MAF
    - Missing rate



## step 3 - imputing missing genotypes

- 3.step\_imputation.sh
  - Impute missing genotype data:
    - LHCI



#### step 4 - run the GWAS

#### 4.gwas.sh

- Run GWAS through the stand-alone script
- (try both gwas\_rrblup.R and gwas\_statgengwas.R)



#### **NEXT LECTURE**

## A bioinformatic pipeline for GWAS

