

Ættarbond, ættarbregði og ílegur

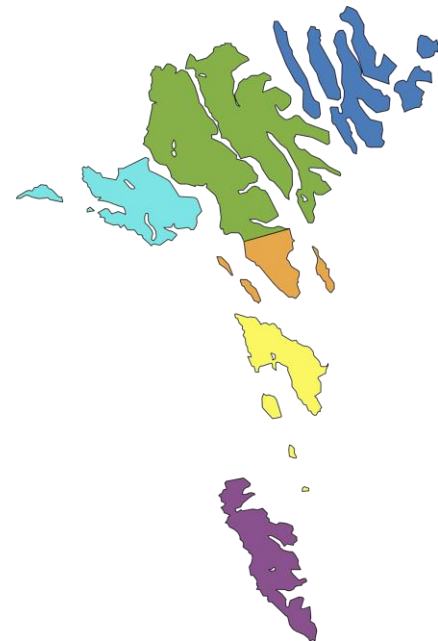
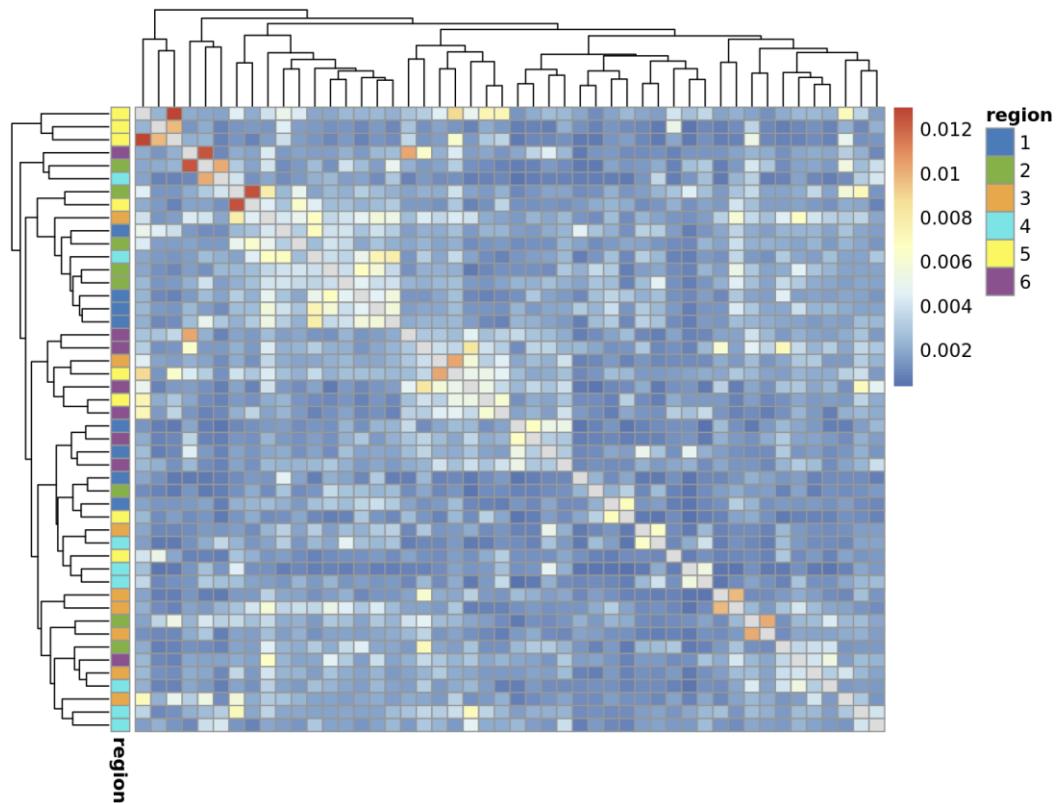
Háttaløg í sambandi við Ættarbandsskránnu



Ólavur Mortensen



48 útvældir luttakarar til genom sekventering



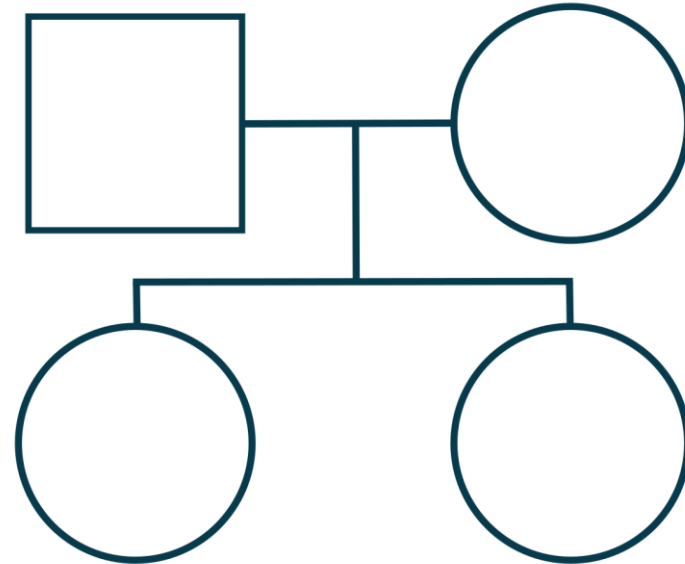
Endamál

- 40 FarGen luttakarar skulu **genom sekventerast**
- Hesi 40 skulu brúkast til **populasjónsgenetiskar analysur**
 - Populasjóns struktur
 - Genetisk drift
 - Natúrlig seleksjón
 - Effektiv populasjónsstødd
- Hesi skulu *umboða føroyingar best møguligt* (genetiskt margfeldi)
- Hesum røkkka vit við **Ættarbandskránni**

Skyldskapur og genetisk líkheit

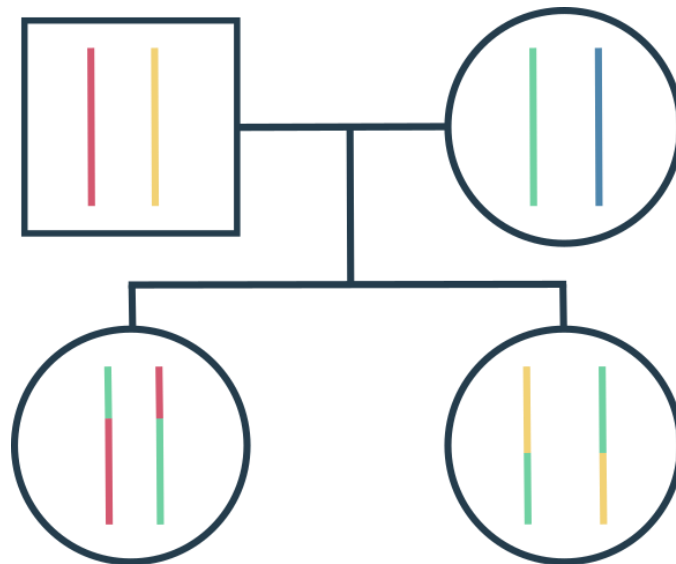
Kinship

Skyldskapur	Koeffisientur
Foreldur-barn	$\frac{1}{2}$
Systkin	$\frac{1}{4}$
Systkinabarn	$\frac{1}{16}$
Dupult systkinabarn	$\frac{1}{8}$
...	...



Kinship

23 kromosom
Rekombinación



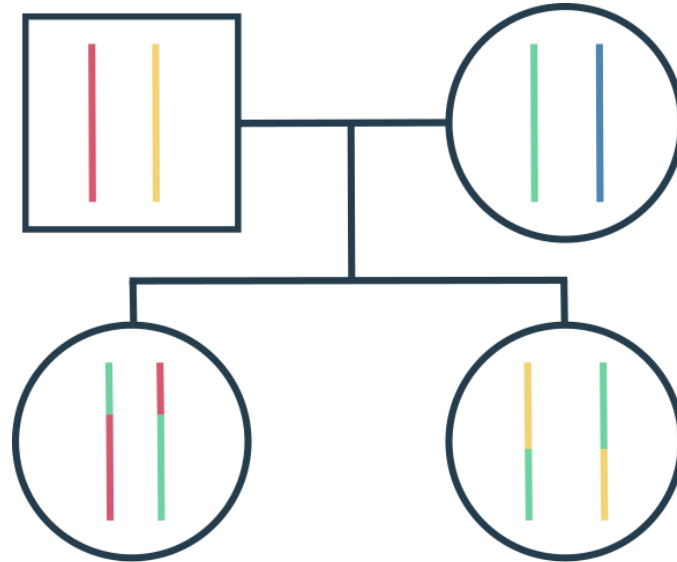
Kinship

23 kromosom

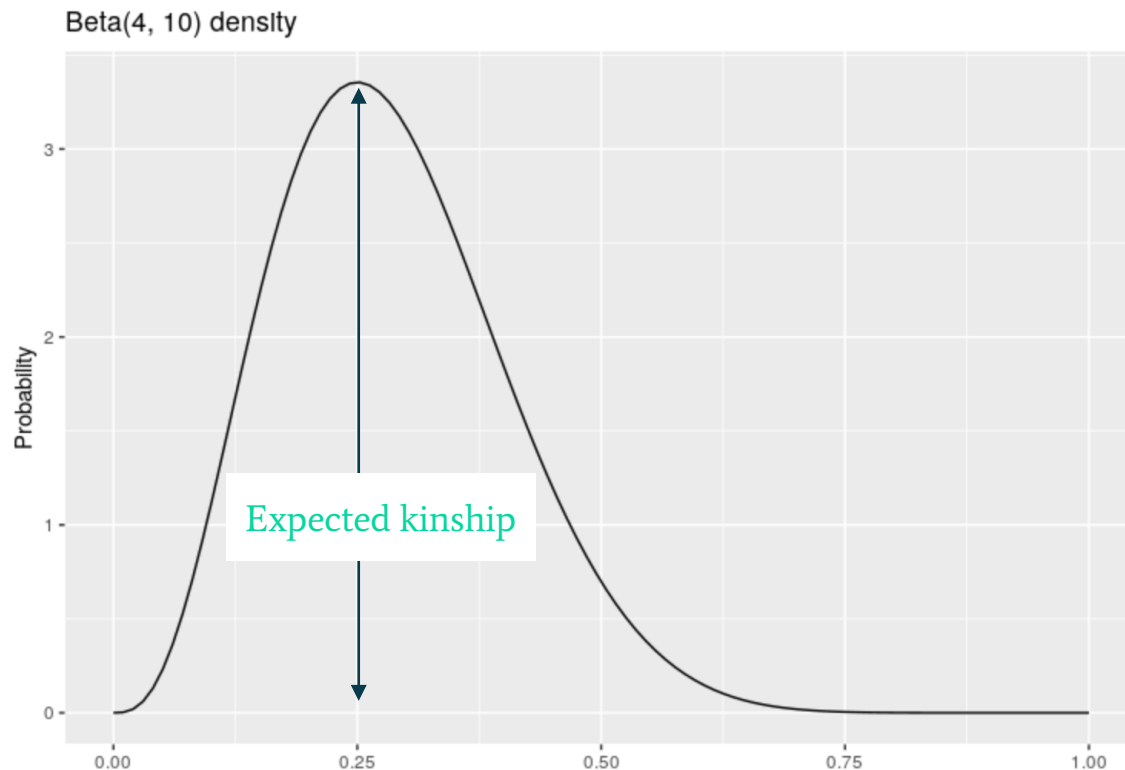
Rekombinación

Expected kinship: $\frac{1}{4}$

Realized kinship: $\frac{1}{2}$



Kinship fordeiling fyri tvey systkin

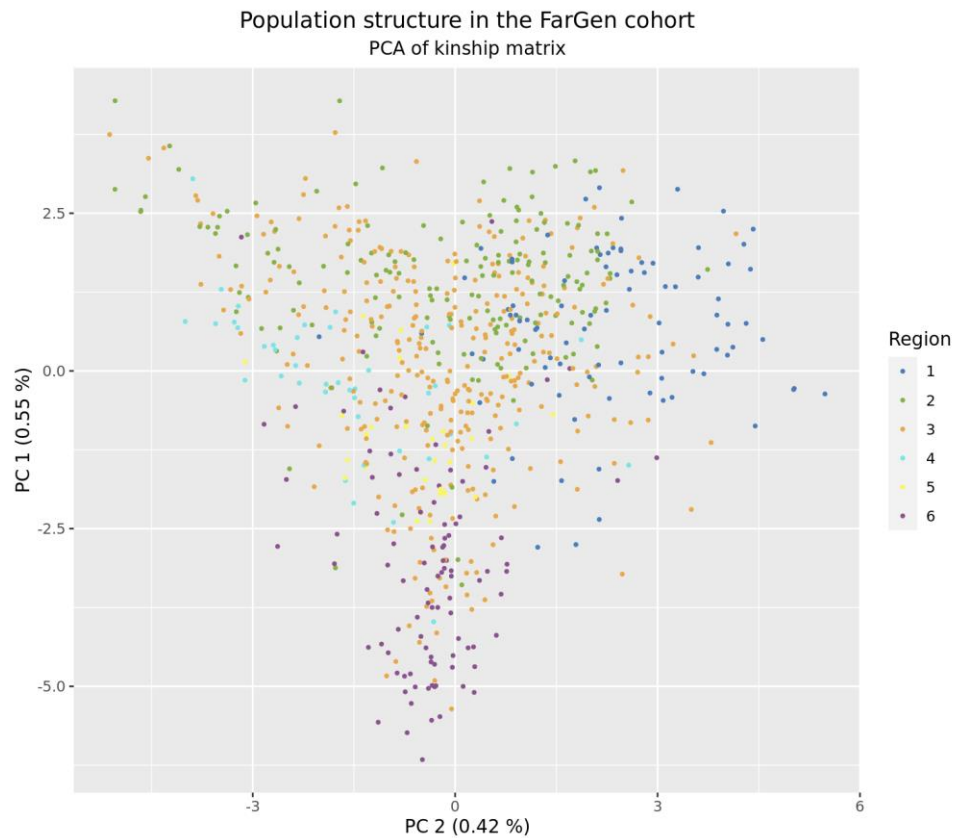
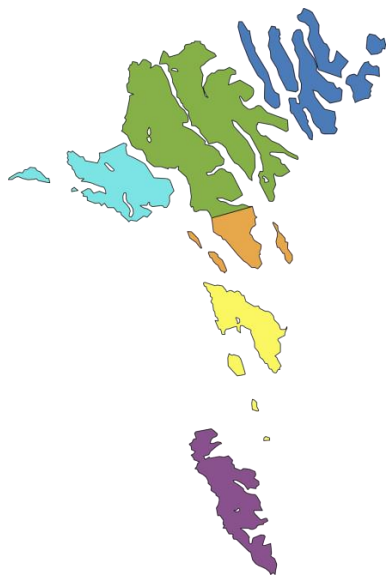


Realized kinship

**48 útveldir luttakarar til
genom sekventering**

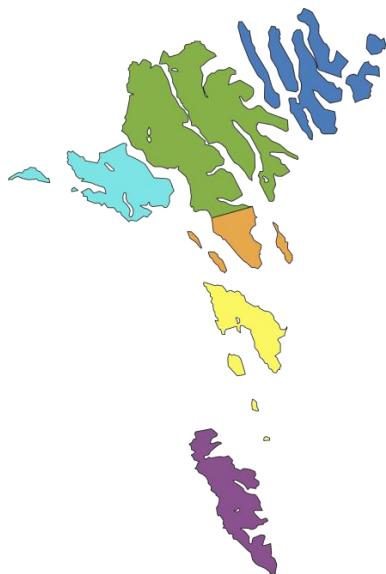
Populasjóns struktur

Principal Component Analysis (PCA)

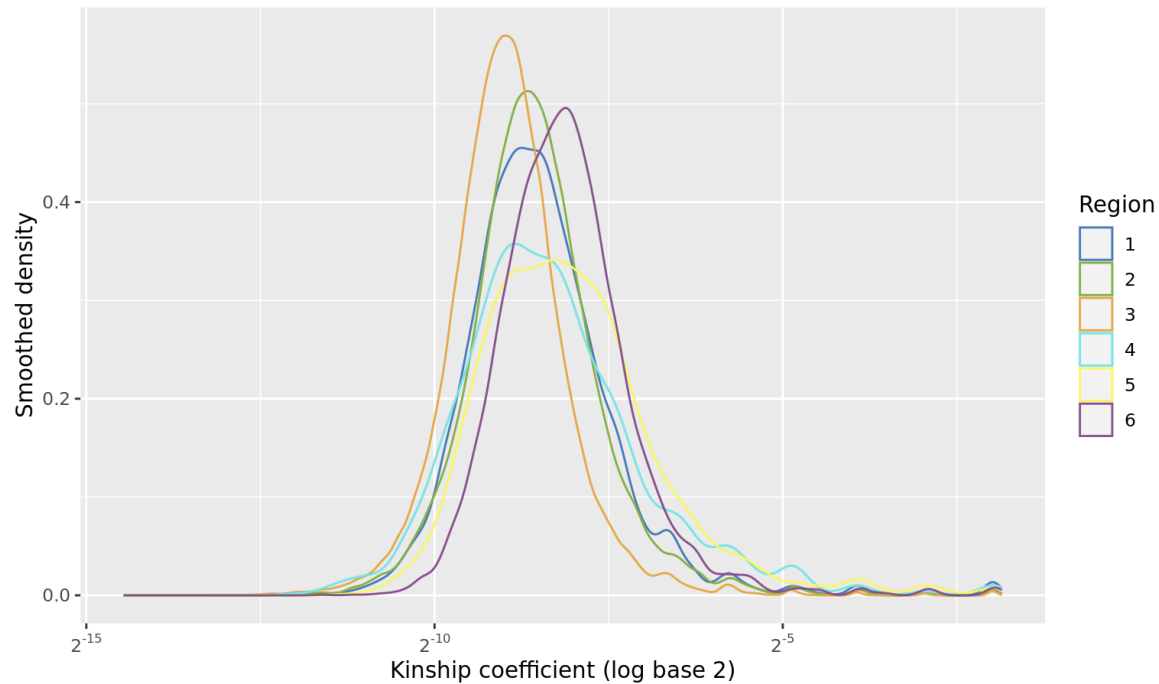


Kinships deilt á øki

Smoothed density plot.

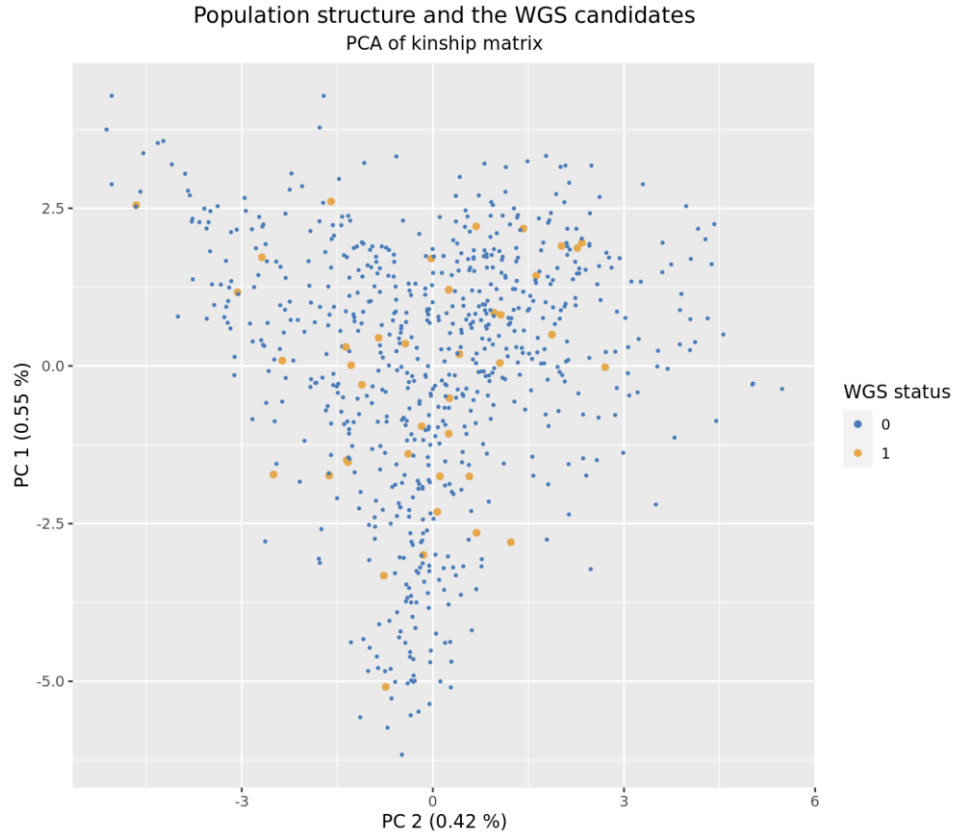


Distribution of kinship values for each region



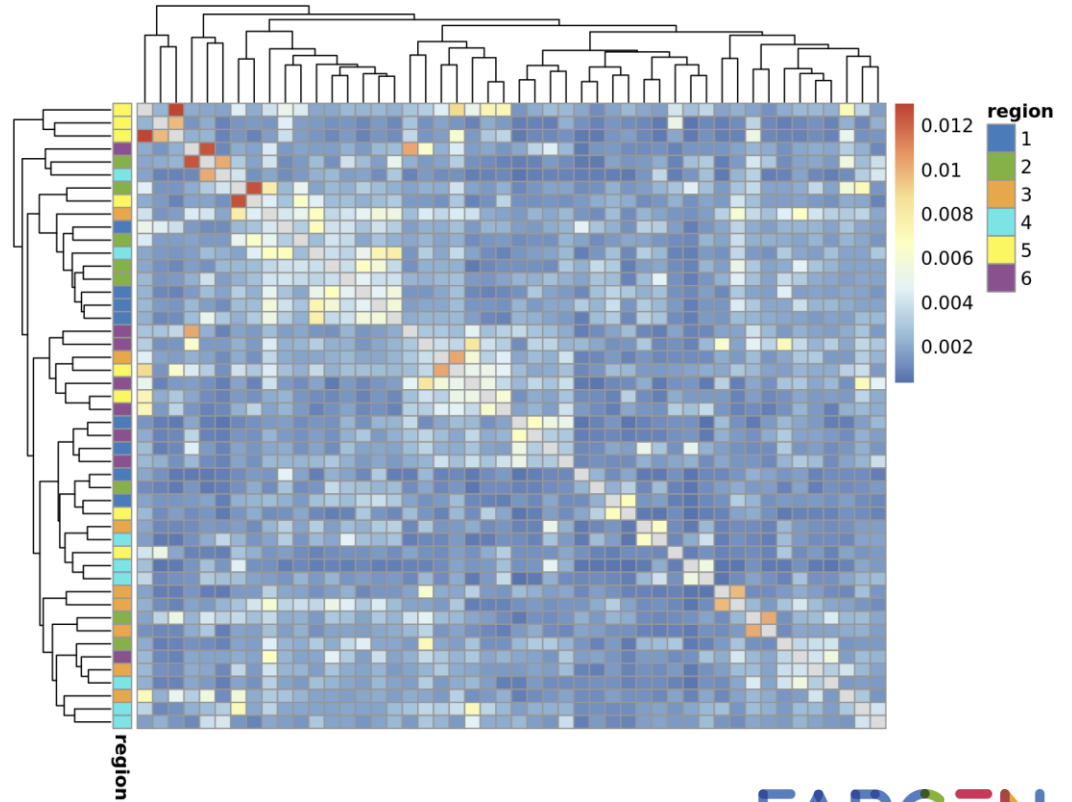
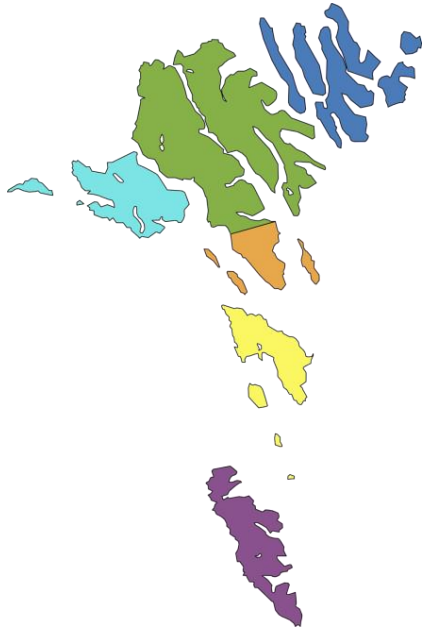
Populasjóns struktur og teir 48 útváldu luttakararnir

Principal Component Analysis (PCA)



Clustering av teimum 48 útvaldu luttakarunum

Heatmap við hierarkisk clustering.



FARGEN

Takk fyri

Vísinda) *vøka*

granskingar) ráðið