

GHEP-ISFG 2026 Workshop: **Disaster Victim Identification**

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Exercise set II. Pedigrees and measures of relatedness

QuickPed is available online here: <https://magnusdv.shinyapps.io/quickped>.

Exercise II-1

Use QuickPed to draw the pedigrees and compute the kinship coefficient for the following relationships.

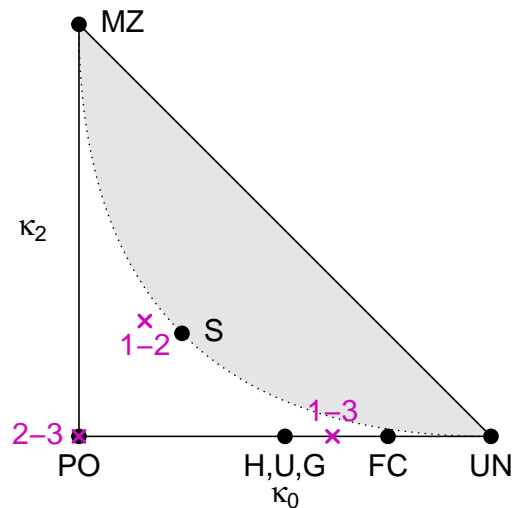
- Grandaunt – grandnephew.
- Half first cousins once removed.

Exercise II-2

Ana and Benny have the same mother, and their fathers are maternal half siblings.

- Draw the pedigree by hand. What is the relationship between Ana and Benny?
- Draw the pedigree in QuickPed. (*Hint: Start with the fathers.*)
- Compute their IBD coefficients ($\kappa_0, \kappa_1, \kappa_2$) and plot the corresponding point in the IBD triangle.

Exercise II-3 (Pedigree reconstruction)



- The triangle above shows pairwise kappa estimates for three male individuals, labelled 1, 2 and 3. How do you interpret the relationship between each pair? How confident are you in each case?
- Use the pairwise estimates to deduce the pedigree connecting the individuals.

Bonus exercises (if you have time)**Exercise II-4**

Draw your own family tree in QuickPed.

Exercise II-5

Recreate the following pedigree plot in QuickPed as accurately as possible:

