The R package trioClasses for definition of the class FamilyExperiment, an extension of SummarizedExperiment, for use in trio based analyses of genetic data.

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1 Packages & Data

```
> library("trioClasses")
> library("CleftCNVAssoc")
> source("~/jhsph/R/packages/CleftCNVAssoc/vignettes/curated/make-data.R")
> gr.deletion.beaty <- gr.beaty[values(gr.beaty)$numsnp >=
     10 & values(gr.beaty)$cn %in% 0:1]
> homos.beaty <- with(values(gr.deletion.beaty), cn ==
> gr.deletion.beaty <- c(gr.deletion.beaty, gr.deletion.beaty[homos.beaty])</pre>
> gr.deletion.pitt <- gr.pitt[values(gr.pitt)$numsnp >=
     10 & values(gr.pitt)$cn %in% 0:1]
> homos.pitt <- with(values(gr.deletion.pitt), cn == 0)</pre>
> gr.deletion.pitt <- c(gr.deletion.pitt, gr.deletion.pitt[homos.pitt])
> system.time(cnv.obj.beaty <- CNVMatrix(gr.deletion.beaty))</pre>
   user
           system elapsed
1336.652
          0.112 1345.292
> system.time(cnv.obj.pitt <- CNVMatrix(gr.deletion.pitt))
  user system elapsed
907.500 0.012 912.392
```