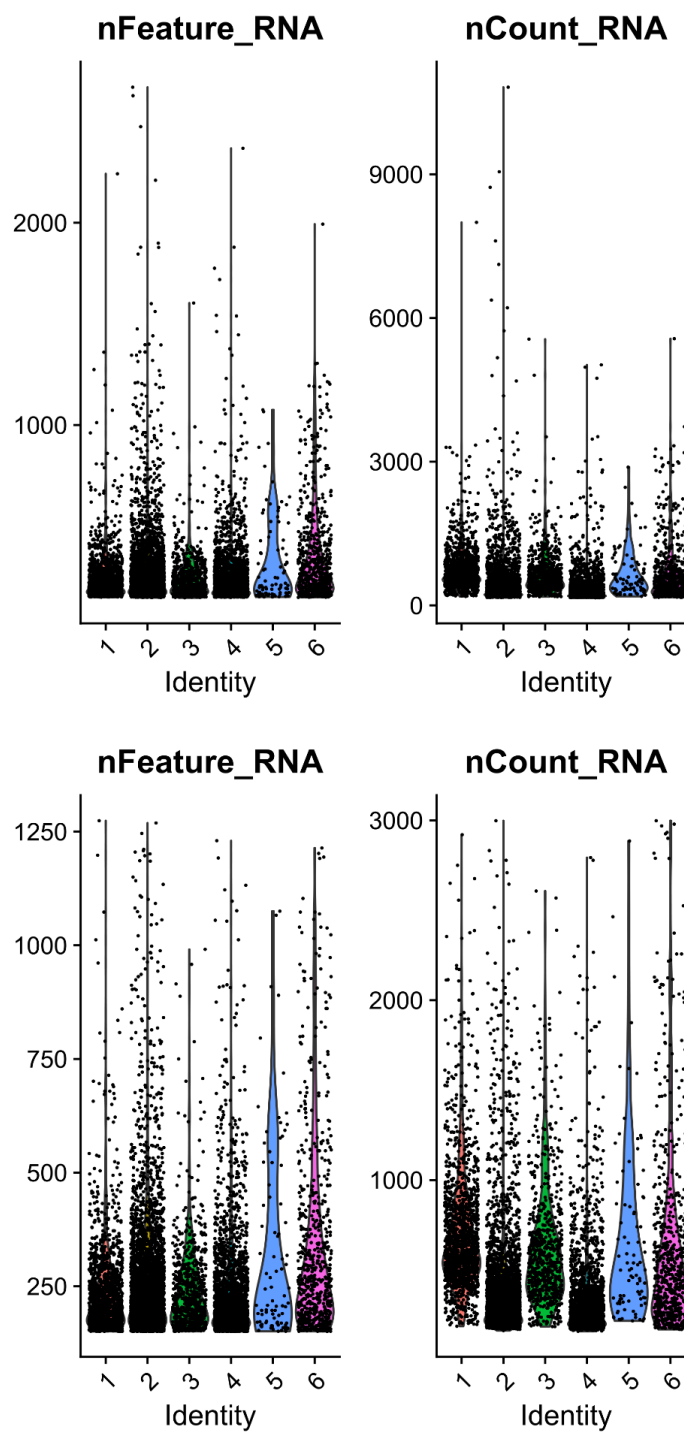**SUPPLEMENTARY FIGURES**

Figure 1. Violin plots showing all 6 samples before (top) and after (bottom) quality control cut offs and filtering.
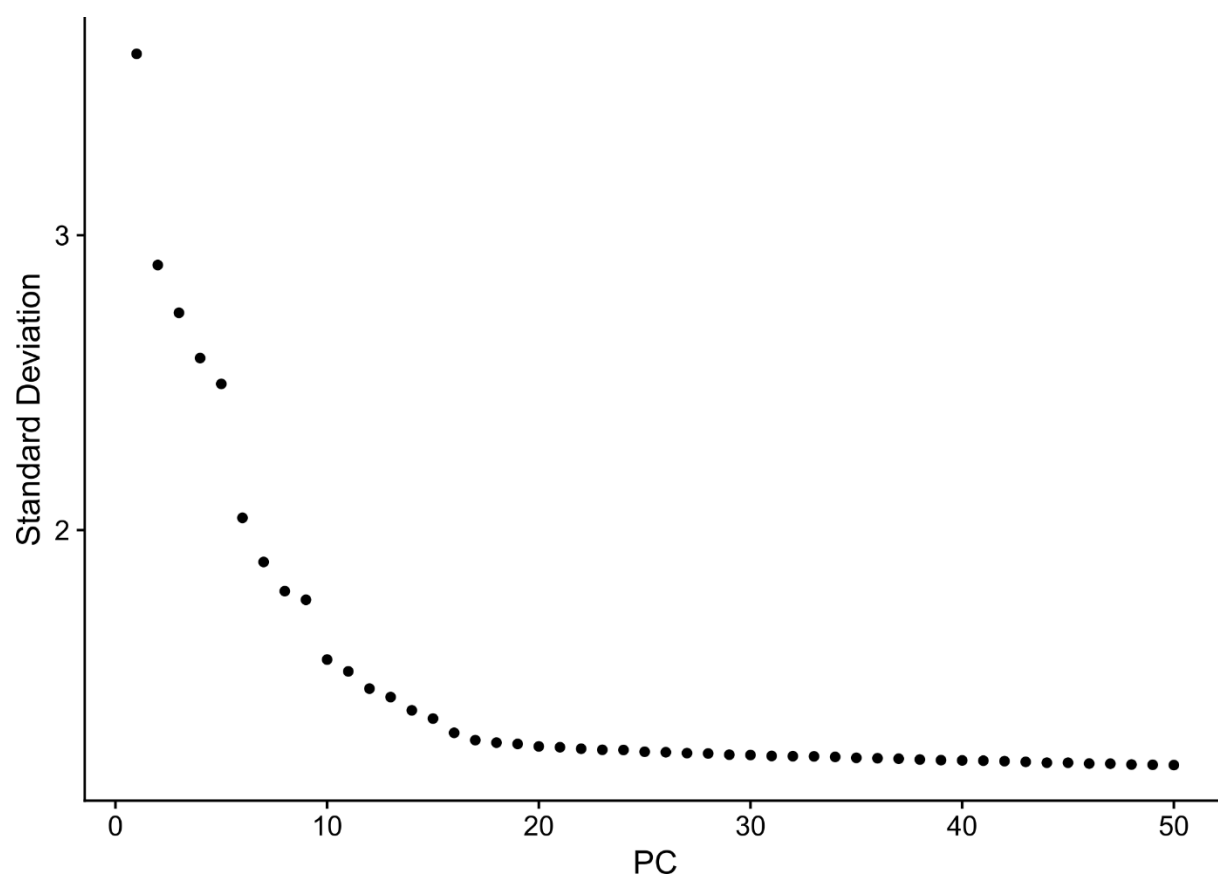
Figure 2. Elbow plot exhibiting principal component rankings based on associated explained variation.
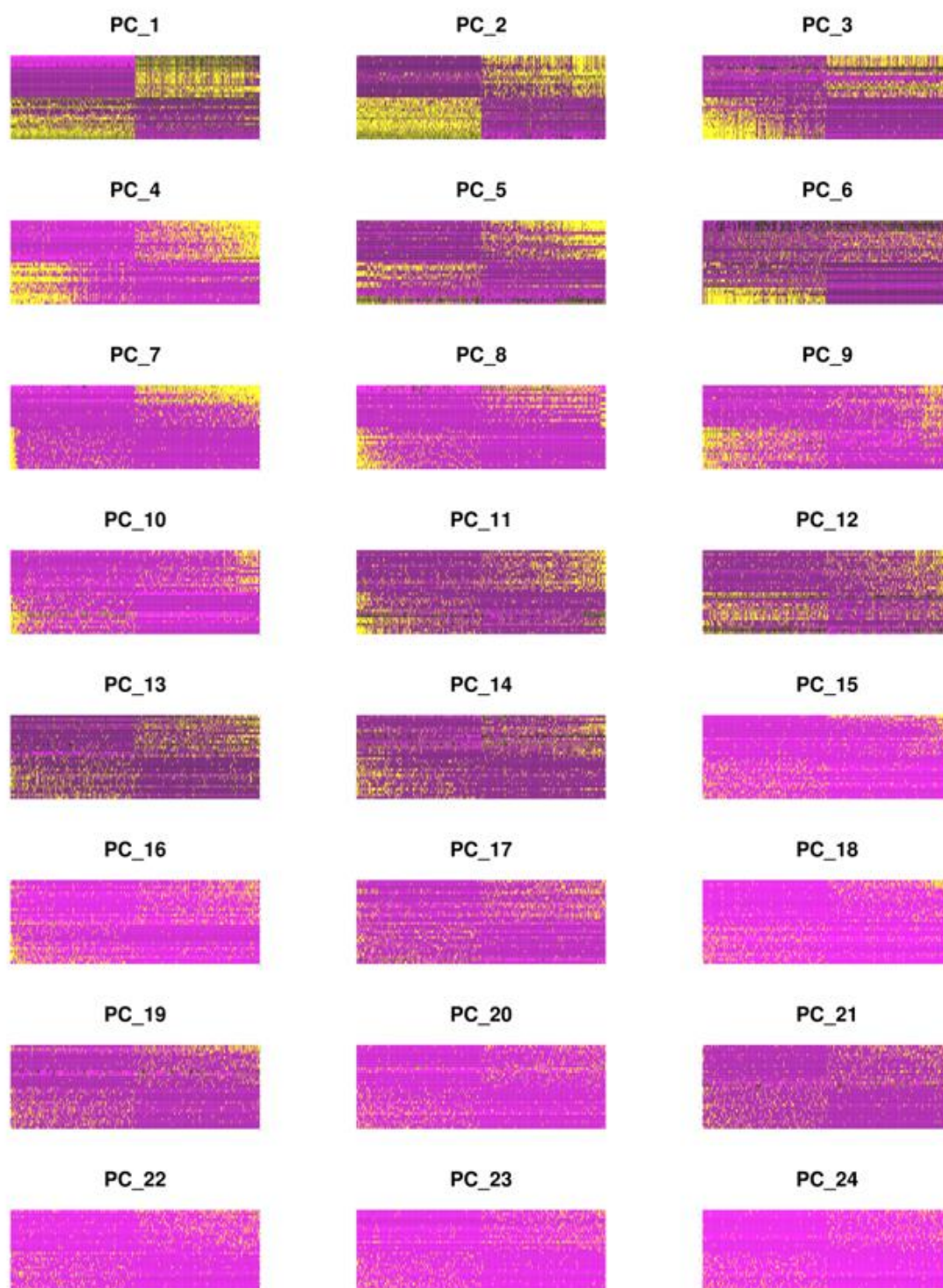
Figure 3. Differential gene expression heatmaps of the first 24 principle components, with genes representing rows and cells representing columns.
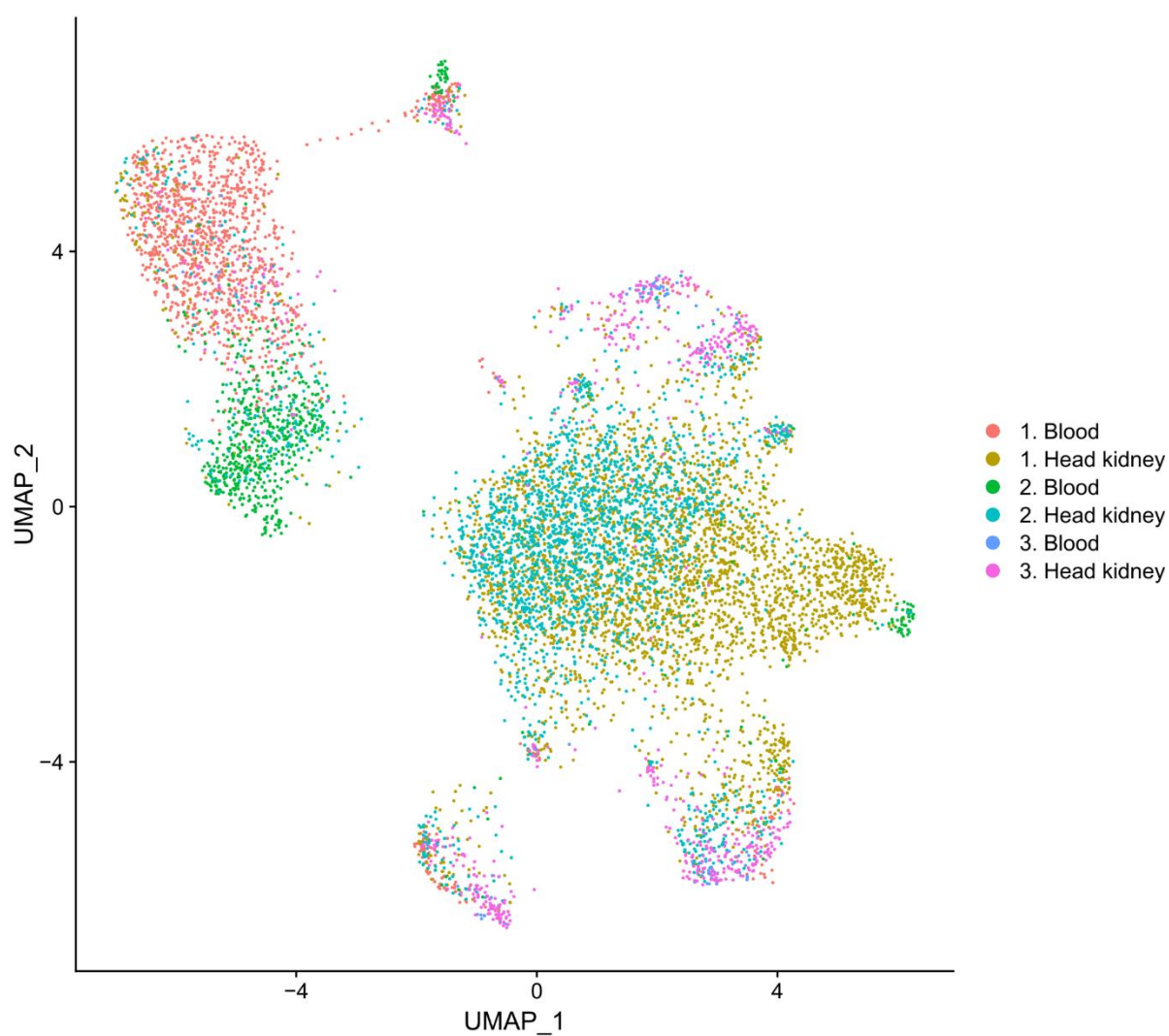
Figure 4. (a) Uniform manifold approximation projection (UMAP) showing the extracted origin of cells, from three *Syngnathus typhle* individuals. Legend numbers (1, 2, 3) indicate the fish individual.