On the 10x system, cells or nuclei are loaded and captured in emulsions with beads. Each bead has thousands of barcodes containing a polydT sequence to bind mRNA, a unique molecular identifier sequence that can account for duplication bias and 10X barcode that will identify the specific cell.

Currently, several technologies are available:

- 3' mRNA gene expression
- 5' V(D)J gene expression
- ATAC seq
- Cell surface protein measurement
- Gene Expression CRISPR screening
- Copy number (CNV) profiling

Example of knee plot. Cells were loaded to capture 5000 cells. 4100 cells were identified, for which 97% of reads mapped to the reference genome.