illumina®

Make room for more **discoveries**

Higher-quality, lower-cost multiomics on the NovaSeq™ X Series and 25B Flow Cell[1]

Here is what 16 billion MORE reads means for your research:

Single-cell RNA sequencing (scRNA-Seq)	Whole-transcriptome sequencing (WTS)	Whole-genome sequencing (WGS) + WTS
1.6M More Cells[1]	**320** More Samples[1]	**35** More Samples[1]

62% lower cost across these applications[1]

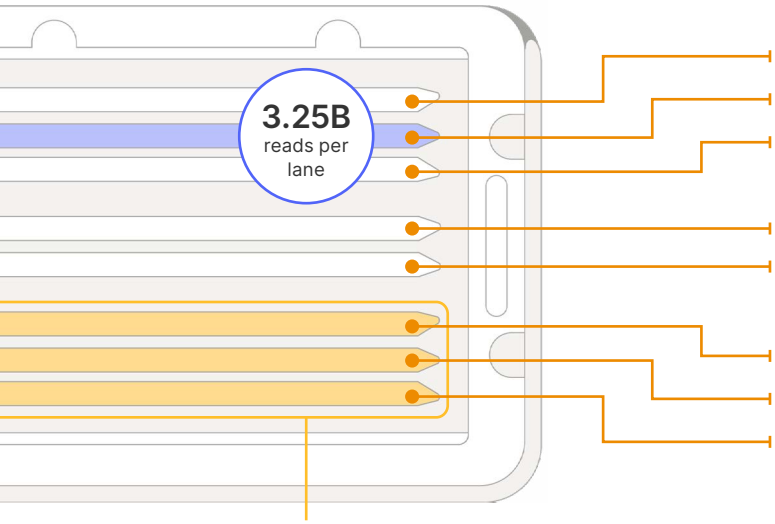
> *The NovaSeq X Series has greatly increased our data output with the newly launched 25B flow cell. **Our output will be almost 3× greater** and allow us to process even **more exomes** and genomes at a **lower cost** without compromise on quality.*
>
> **John Overton, PhD, Regeneron Genetics Center**

Multiomics at a lower cost than one “ome” alone: sequencing both the whole exomes and whole transcriptomes on the NovaSeq X 25B flow cell costs **~18% less** than running whole exome sequencing alone on previous platforms.

Be confident in your results with:

- Fewer batch effects
- Better detection of variants
- Higher statistical significance

Enable many diverse projects using 8 individually addressable lanes



Three lanes of the new 25B flow cell equal one entire NovaSeq 6000 S4 flow cell

Here is an example of diverse libraries that can be run **simultaneously** on a NovaSeq X 25B flow cell:

- 8 whole genomes
- 6–7 samples whole genome bisulfite sequencing (WGBS[2])
- 65 whole transcriptomes[3]
- 130 coding transcriptomes[4]
- 65 samples assay for transposase-accessible chromatin using sequencing (ATAC-Seq)[5]
- 16 samples scRNA-Seq + protein[6]
- 7–8 samples scRNA-Seq + scATAC-Seq[7]
- 65 samples chromatin immunoprecipitation using sequencing (ChIP-Seq)[8]

With automated independent lane loading and 384 unique dual indexes available, researchers can multiplex over **3000 samples** on a single flow cell.

Multiomics made more accessible on the NovaSeq X Series

3X higher accuracy with XLEAP-SBS™ Chemistry[1]

~2X faster[1]

2.5X more flow cells stored in the same refrigerator space[1]

Onboard DRAGEN™ bioinformatics at **no additional cost**[1]

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Learn more about the methods made easier, faster, and more affordable on the NovaSeq X Series

Click here to download the new NovaSeq X eBook

1. Compared to S4 flow cell on NovaSeq 6000. 2. Whole-genome bisulfite sequencing, Zymo-Seq WGBS (Zymo Research), 500M reads per sample. 3. Illumina Stranded Total RNA Prep, 50M reads per sample. 4. Illumina Stranded mRNA Prep, 25M reads per sample. 5. Assay for transposase accessible chromatin, 50M reads per sample. 6. Chromium Single Cell Gene Expression Flex (10x Genomics), BioLegend TotalSeq antibodies, 10K cells per sample, 10K reads per cell, 100 reads per antibody derived tag. 7. Chromium Single Cell Multiome ATAC + Gene Expression (10x Genomics), 10K cells per sample, 25K reads per cell for scATAC-Seq, 20K reads per cell for scRNA-Seq. 8. Chromatin immunoprecipitation, 50M reads per sample.