

# Overview of New Chromium Product Launches

10x Genomics Q3 2024 Earnings – Supplemental Materials October 29, 2024

# Introducing New Chromium Single Cell Product Families

# New naming convention for our products



**Universal Assays** 

**Universal 3' Gene Expression**Formerly Single Cell Gene Expression

**Universal 5' Gene Expression**Formerly Single Cell Immune Profiling



Flex Assays

Flex Gene Expression
Formerly Single Cell Gene Expression Flex
(or Fixed RNA Profiling)



**Epi Assays** 

Epi Multiome ATAC + Gene Expression Formerly Single Cell Multiome ATAC + Gene Expression

**Epi ATAC**Formerly Single Cell ATAC

Visit https://www.10xgenomics.com/platforms/chromium/product-family for more information.



# **Chromium Single Cell Product Families**



#### **Universal Assays**

- Gather broad information from diverse species (poly-A genes, isoforms, SNPs, etc.)
- RT-based assays that capture the whole transcriptome, compatible with a diverse set of species
- Multiomic options:
  - 3' and 5' gene expression
  - o TCR/BCR
  - o Protein
  - CRISPR



#### Flex Assays

- Exceptional performance with challenging samples including FFPE
- Probe-based assays that capture 18,000+ coding genes, customizable to fit project needs
- Maximum scale: 2.56M cells/run
- Multiomic options:
  - Gene expression
  - Protein
  - CRISPR



#### **Epi Assays**

- Investigate chromatin state and regulatory elements (ATAC-seq)
- Directly link 3' gene expression and epigenomic profiles from the same nucleus
- Profile up to 80,000 nuclei per run
- Multiomic options
  - Gene expression
  - Chromatin accessibility



# Reminder: Our GEM-X Technology

Powering the next generation of single cell with our Universal 3' and 5' assays



- Up to 2x more genes detected
- 2-fold increase in **cell throughput**
- >2-fold reduction in cost per cell
- Enhanced data quality with a 2-fold reduction in multiplet rate
- Recover up to 80% of cells
- Highly robust with redesigned microfluidics

#### Began shipping in March 2024



# **Introducing New Chromium Single Cell Products**

Expanding access to high performance single cell research

#### Consumables



**GEM-X Flex** 

- Low cost per cell
- Built for mega scale
- Reduced cell input requirements



**GEM-X Universal Multiplex** 

- Low cost per sample
- Simplified multiplexing workflow
- Broad sample compatibility

# Instrument



**Chromium Xo** 

- Low barrier to entry
- Compatible with GEM-X 3' (singleplex and multiplex)
- Ability to upgrade to Chromium X





# Introducing GEM-X Flex

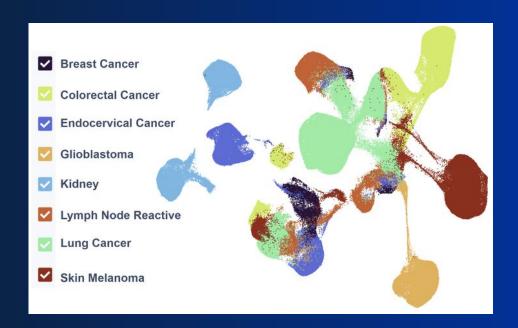
Unprecedented scale.
Ultimate flexibility.
Incredible cost savings.

**NOW SHIPPING** 



# **GEM-X Flex Gene Expression**

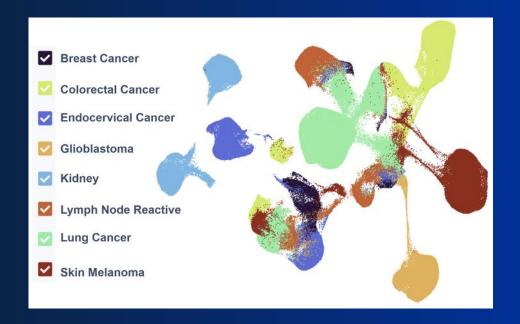
# Product specifications powered by our GEM-X Technology



- 4x lower cell input recommendation: 25K cells/sample
- Improved cell recovery efficiency: Up to 40% improvement during sample prep and 10% improvement during partitioning
- Built to scale: 2-fold increase in cell throughput
- More cost effective: >2-fold reduction in cost per cell
- Enhanced data quality: 2-fold reduction in multiplet rate
- Improved assay robustness: Redesigned microfluidics

# **GEM-X Flex Gene Expression**

High performance, low cost, mega scale



- Efficiently partition millions of cells in less than 6 minutes
- Built to scale: Up to 320,000 cells per channel, for up to 2.56M cells per run, run up to 128 samples in parallel
- Cell size flexibility with no lower limits
- High cell capture rates up to 65%
- Low doublet rates of 0.4% per 1,000 cells



# **GEM-X Flex Gene Expression – Any Sample at Any Scale**

#### **Broad sample compatibility**

# Fresh tissue Frozen tissue



Cell suspensions
Nuclei suspensions



Whole blood



**FFPE tissue** 

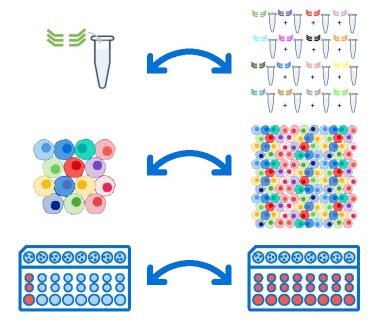
#### **In-line multiplexing**

#### Sample-specific barcode



- Up to 16 samples per channel
- Up to 128 samples per chip

#### Flexible project input



- Up to 2.56M cells per chip
- Up to 80% cell recovery (sample preparation)
- Up to 80% cell recovery (single cell partitioning)
- Low cell input recommendations (25K cells)





# Introducing GEM-X Universal Multiplex

# **OPEN FOR PRE-ORDER**

Easy, accessible single cell multiplexing.

No extra steps.

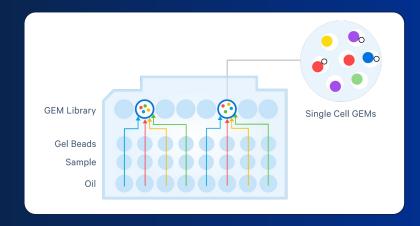
No extra costs.



# **GEM-X** Universal 3' and 5' Gene Expression Multiplex

# Lower cost per sample with on-chip multiplexing

#### On-chip multiplexing workflow



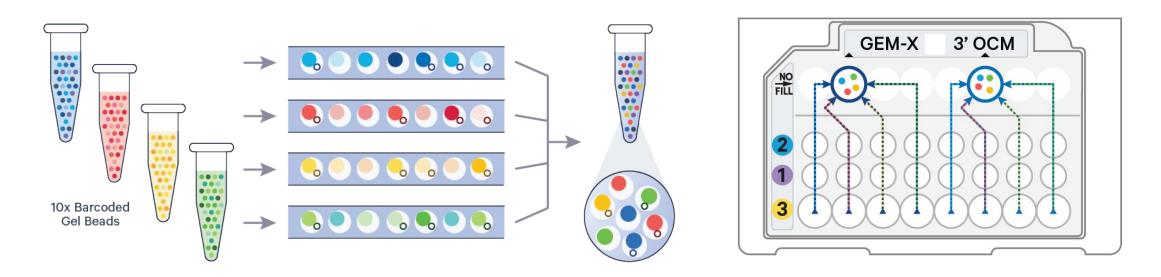
Co-partition cells from four samples, collect all GEMs in the same recovery well, and demultiplex samples computationally after sequencing

- Unmatched GEM-X performance
- Significantly lower per sample cost process up to 8 samples and up to 40K cells/chip
  - Multiplex 4 samples per GEM reaction, 5K cells/sample
  - Analyze limited samples such as organoids or stem cells
- Easy multiplexing no extra steps, no extra costs
  - High cell recovery with low cell input recommendations
  - Analyze diverse species and sample types incompatible with other multiplexing methods



# **GEM-X Universal Multiplex Workflow**

# Streamlined on-chip multiplexing (OCM) workflow



Co-partition cells from four samples, collect all GEMs in the same recovery well, and demultiplex samples computationally after sequencing

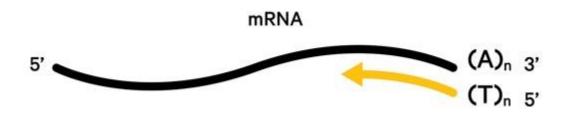
#### Simplified multiplexing approach

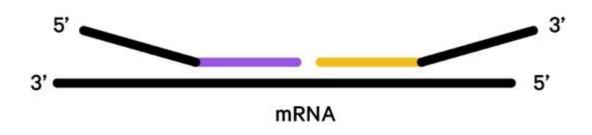
- ✓ Eliminates need for upstream sample tagging
- ✓ Flexible across different sample types (ex. non-human/mouse or nuclei)
- ✓ Supports lower cell inputs compared to traditional multiplexing methods



# Recap: Our Chromium Single Cell Gene Expression Assays

Industry-leading sensitivity and robust performance for all Chromium solutions





# **Reverse transcription-based**

#### **GEM-X Universal 3' and 5' Gene Expression**

- Broad set of information like isoforms, SNPs, etc.
- Species agnostic
- Recommended for low cell input samples

# **Probe-based**

#### **GEM-X Flex Gene Expression**

- Easy sample batching
- Lowest cost at scale
- The only way to run single cell FFPE
- Performs well with low-quality samples





# Introducing Chromium Xo

Advantage of superior reproducibility. Low barrier to entry. Same high performance.

**NOW SHIPPING** 



# Chromium Xo – An Affordable Entry Point to Single Cell

# Performance advantages of instrument-powered single cell workflows

#### Reproducible results

 Automate critical steps for consistent, reproducible results and lower risk of manual errors across experiments

#### **High performance**

 Make use of every sample with cell capture efficiency of up to 80% and high gene sensitivity with GEM-X technology



Compatible with GEM-X Universal 3'
Gene Expression
(singleplex and multiplex)

#### **Streamlined workflows**

- Partition tens of thousands of cells in mere minutes
- Complete your workflow in one day, with just 3 to 4 hours of hands-on time
- Intuitive push-button interface for efficient cell processing without the hassle of cumbersome pipetting methods



# **Summary of Single Cell Instruments**

	Хо	iX	X	
Description	Enables 3' single cell gene expression only	Pairs with core assays and capabilities	Access to full portfolio of Chromium assays and capabilities	
Assay Compatibility	<ul> <li>GEM-X Universal</li> <li>3' Gene Expression</li> <li>3' Gene Expression Multiplex</li> </ul>	<ul> <li>GEM-X Universal</li> <li>3' Gene Expression</li> <li>5' Gene Expression</li> <li>GEM-X Flex Gene Expression</li> <li>Next GEM</li> <li>Epi Multiome ATAC + Gene Expression</li> <li>Expression</li> <li>Epi ATAC</li> </ul>	<ul> <li>GEM-X Universal</li> <li>3' and 5' Gene Expression</li> <li>3' and 5' Gene Expression Multiplex</li> <li>GEM-X Flex Gene Expression</li> <li>Next GEM</li> <li>Epi Multiome ATAC + Gene Expression</li> <li>Epi ATAC</li> </ul>	
List Price	\$25,000	\$69,000	\$105,000	
Upgrades & Connectivity	Upgradable to Chromium X and compatible with 10x Cloud instrument management	Upgradable to Chromium X and compatible with 10x Cloud instrument management	Compatible with 10x Cloud instrument management	



# **Summary of Single Cell Consumables**

	GEM-X			Next GEM	
Assay	Universal 3' / 5' Singleplex	Universal 3' / 5' Multiplex	Flex	3' and 5'	Flex
Maximum Cells per Channel	20,000	5,000	20,000 - 320,000	10,000	8,000 - 10,000
Cost per Sample	~\$1,480	~\$560	~\$330 - \$1,750	~\$1,650	~\$400 - \$1750
Cost per Cell	~\$0.07	~\$0.11	~\$0.01 - \$0.09	~\$0.17	~\$0.05 - \$0.17



# **Rethink What Chromium Can Do**

# **Driving the next step-up in scale**

#### Low cost assays at scale

1 cent per cell with GEM-X Flex2 cents per cell with GEM-X Universal 3'+5'

with overloading

Low sequencing requirements

Flexible less expensive sequencing platforms

# Million to Billion Cell Studies

#### **Increased and flexible throughput**

5M cells per kit256 samples per kitFix, batch and simple multiplex

#### Reliable, robust performance

Superior sensitivity and recovery
Demonstrated reproducibility and consistency
Limited cell loss and batch effects
Robust automation of partitioning and library prep

# Broad multiomic + application capability

Transcriptome
Proteome and Immunome
CRISPR
Optimized for a diverse set of applications







# 10x Cloud Analysis: Automated Cell Annotation

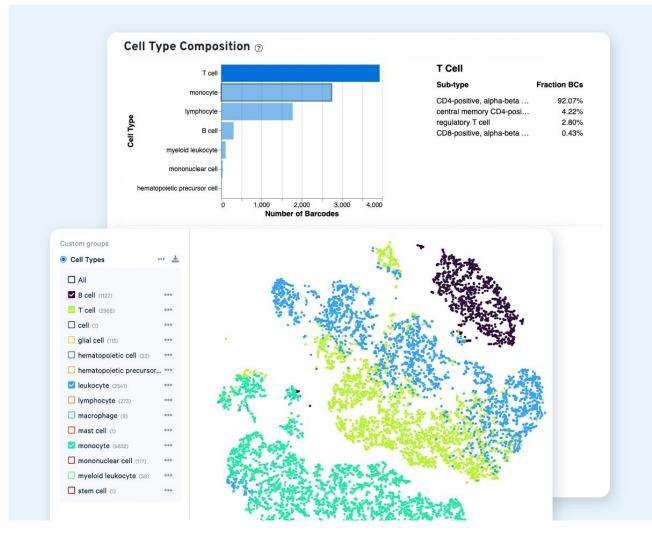
High level cell typing (e.g. T cell) creates an easy starting point for data analysis

**Instant visualization** in Loupe Browser without manual steps

**More accurate insights** with annotations from CELLxGENE database

# Beta offering available now on 10x Cloud!

Annotation was performed using a model that was co-developed by 10x Genomics and the Cellarium AI Lab at the Data Sciences Platform of the Broad Institute.





# **GEM-X Universal: Multiomics Now Enabled**

# **GEM-X Universal**3' Gene Expression

- Gene Expression
- Cell Surface Protein

# **GEM-X** Universal **5'** Gene Expression

- Gene Expression
- Cell Surface Protein
- V(D)J
- CRISPR / gRNA





# **GEM-X Universal: Upstream Fixation Now Enabled**

# **NEW!** Demonstrated protocol for upstream fixation of human PBMCs

Simple workflow with an easy, scalable protocol consistent across users

Flexible sample processing and storage

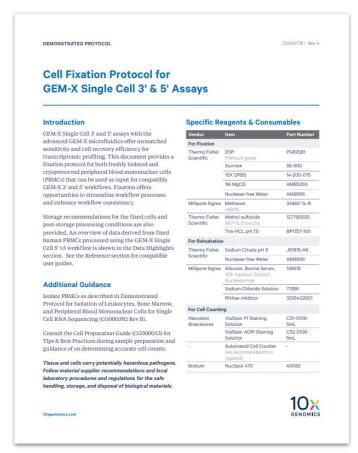
Consistent and validated across healthy and diseased samples

#### Compatible with GEM-X workflows for isolated human PBMCs

- Demonstrated protocol with off-the-shelf reagents
- Optimized for improved cell recovery
- Maintains GEX and VDJ information

#### **Increased sample stability**

- Samples can be stored in fixative for at least 1 month at -80°C
- Logistics can be eased, including sample batching



Workflow information can be found in the <u>Demonstrated Protocol (CG000776)</u>

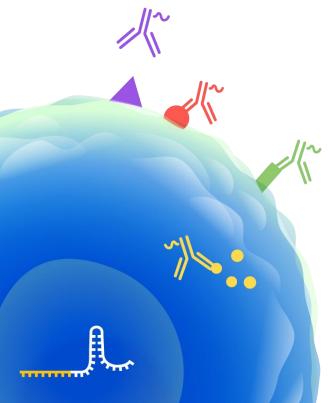


# **GEM-X Flex: Comprehensive Multiomic Analysis**

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# **GEM-X Flex Gene Expression**

- Gene Expression
- Cell Surface Protein
- Intracellular Protein
- CRISPR / gRNA (with custom probes)





# **GEM-X Flex: Whole Blood Fixation Now Enabled**

# **NEW!** Demonstrated Protocol for upstream whole blood fixation

#### **Compatible** with Flex workflow for human samples

 Equivalent or better assay performance compared to cells isolated from unfixed blood

#### Simple workflow

- Consistent across users
- Easy protocols, can be scaled

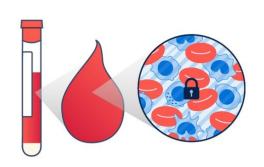
#### **Increased** sample stability

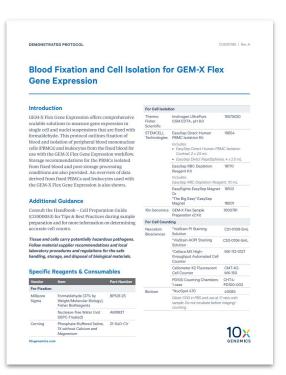
- Samples can be stored in fixative for 7 days
- Logistics can be eased, including transport

Flexibility in sample processing and storage

**Enables** both PBMC and leukocyte/neutrophil isolation

Consistent across healthy and diseased samples





Workflow information can be found in the Demonstrated Protocol (CG000785)



# **Forward-Looking Statements**

Certain statements in this presentation and the accompanying oral commentary are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 as contained in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe" harbor" created by those sections. All statements, other than statements of historical facts, may be forward-looking statements. Forward-looking statements generally can be identified by the use of forward-looking terminology such as "may," "might," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "see," "estimate," "predict," "potential," "would," "likely," "seek" or "continue" or the negatives of these terms or variations of them or similar terminology, but the absence of these words does not mean that a statement is not forward-looking. These forward-looking statements include statements regarding the features, performance, capabilities, uses, costs, demand, market opportunities and market growth, drivers and adoption of our current and potential future products, as well as product roadmap, expected development directions and expected release timelines of potential products. These statements are based on management's current expectations, forecasts, beliefs, assumptions and information currently available. Actual outcomes and results could differ materially from these statements due to a number of factors and such statements should not be relied upon as representing 10x Genomics, Inc.'s views as of any date subsequent to the date of this press release. 10x Genomics, Inc. disclaims any obligation to update any forward-looking statements provided to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law. The material risks and uncertainties that could affect 10x Genomics, Inc.'s financial and operating results and cause actual results to differ materially from those indicated by the forward-looking statements made in this press release include those discussed under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the company's most recently-filed 10-K and elsewhere in the documents 10x Genomics, Inc. files with the Securities and Exchange Commission from time to time. Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, performance or achievements. In light of the foregoing, investors are urged not to place undue reliance on any forward-looking statement or third-party data in reaching any conclusion or making any investment decision about any securities of the Company.

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