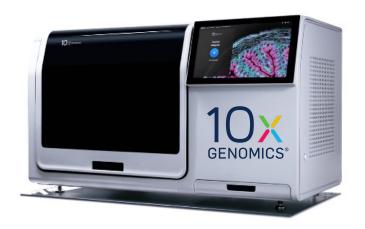
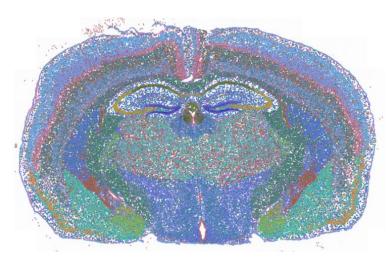
## **10X XENIUM IS AT UAB!**

Launch your high-performance spatial transcriptomics experiments to accelerate discovery in brain function and disease

The Brain Health & Disease Across the Lifespan task force in the UAB Heersink School of Medicine is requesting applications for a newly launched \$30,000 voucher program to support integration of the 10X Xenium spatial transcriptomics platform into ongoing or new projects at UAB. The Xenium uses high sensitivity padlock probe rolling circle amplification technology to quantify mRNAs in single cells within tissues. This technology multiplexed supports highly detection transcripts across a range of expression levels. We welcome applications using nervous system tissue from animal model systems, human postmortem brain tissue, human-derived neuronal systems, and brain organoids.





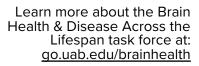
- Pre-designed panels for mouse and human brain (250 genes)
- Customizable panels
- Up to 5,000 genes
- Samples can be FFPE or fresh frozen
- 10.45mm x 22.45mm imageable area
- Integrated with Lunaphore COMET Multiplex Protein Imaging System to detect up to 40 proteins in same tissue

Please submit proposals as a single PDF document containing: 1) a one-page cover letter listing the names and affiliations of PD/Pls, contact information, and title of the application, 2) two-page description of the proposed research (including experimental design, timeline & milestones, and plans for of future grant submissions), 3) NIH biosketches for all project Pls, and 4) Budget and budget justification. Xenium voucher program funds can be used for reagent purchases and service core fees related to Xenium use at the UAB Flow Cytometry and Single Cell Core Facility (located in the Shelby Interdisciplinary Biomedical Research Building), and/or for analysis of Xenium datasets in the UAB Biological Data Sciences Core. Budget requests should not exceed \$30,000. Proposals should be submitted via email to Program Director Audrey Coachman (audrey11@uab.edu) by January 9th, 2026. Awards will be announced in early spring 2026. We intend to support up to two projects.

Eligible applicants must hold a full-time UAB faculty appointment at any rank in the Heersink School of Medicine. Priority will be given to projects that share strong thematic overlap with the Brain Health task force goals. Please see page 2 of this RFA for additional details.









## **Additional instructions**

Investigator capabilities. Investigators will be responsible for providing Xenium-ready tissue sections to the UAB Flow Cytometry and Single Cell Core Facility for processing on the Xenium instrument. If your laboratory does not have tissue sectioning capabilities, please consult with the UAB Pathology Core Research Lab or the Animal Resource Program Comparative Pathology Lab about these services. Additional information on the 10X Xenium platform and tissue preparation guidelines can be found at the link below. Applicants are encouraged to include information about experimental feasibility in the two-age research description. This may include information about parallel single cell transcriptomics datasets from the same tissue, expertise with microscopy for tissue sections, completion of the 10X pipeline for custom panel generation, and/or data analysis expertise.

https://www.10xgenomics.com/support/in-situ-gene-expression

**Analysis plans.** It is highly recommended that interested applicants budget to use the UAB Biological Data Sciences (U-BDS) core for consultation, data analytics, and visualization of resulting Xenium datasets. The U-BDS offers three distinct services: Initial Consultation (very strongly recommended), TIER I, and/or TIER II Services. If you choose not to include U-BDS services in your budget, be sure to indicate access to expertise and tools required for data analytics and visualization within your two-page research description.

**Budget considerations & feasibility.** Pricing information for Xenium reagents and services can be found at the link below. Individual Xenium "runs" are two slides, each of which can fit up to 4 whole coronal sections of the mouse brain. Add-on panels to include additional genes not available in off-the-shelf panels will add additional expense. Investigators will also be responsible for the cost of UAB Genomics Core analysis of RNA quality within the sample prior to the Xenium analysis.

https://www.uab.edu/medicine/immunologyinstitute/research-cores/immunology-relevant-services/xenium-services

For information about Xenium services at UAB, please contact **Madhubanti Basu** in the UAB Flow Cytometry and Single Cell Core Facility at mbasu@uabmc.edu.

For information about the Brain Health Xenium voucher program, please contact **Audrey Coachman** at <u>audrey11@uab.edu</u>.

For information about analysis of Xenium datasets in the UAB Biological Data Sciences Core, please contact **Dr. Lara lanov** at <u>lianov@uab.edu</u>.

Please note that this award is not intended to be combined with other Xenium voucher programs.



Learn more about the Brain Health & Disease Across the Lifespan task force at: go.uab.edu/brainhealth