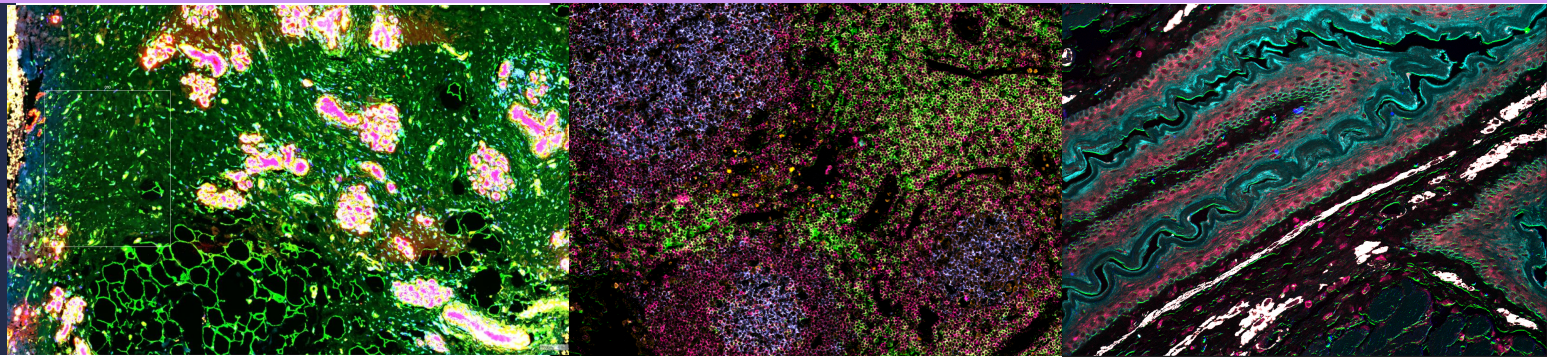
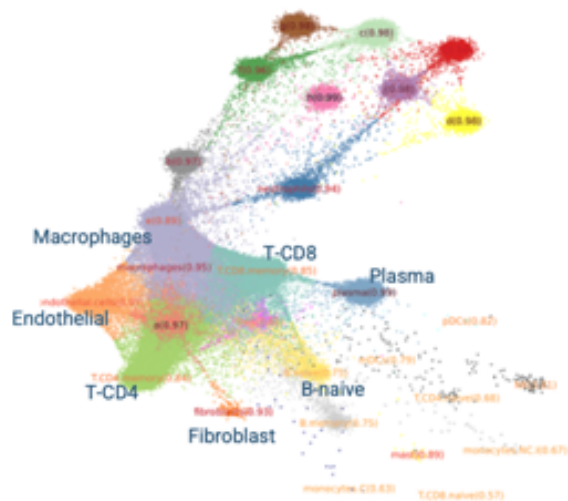


# Spatial Biology Core



## About Us

Spatial Biology Core brings the most modern research for studying cellular and molecular interactions in the spatial context of tissues and organs. The spatial analysis combines single-cell, spatial RNA sequencing, high-resolution microscopy, and quantitative image data analysis to enable large-scale spatial genomics and proteomics studies.



## Our Services

The researchers have access to NanoString CosMx SMI a true single-cell resolution, and 10x Genomics Visium HD to explore the whole transcriptome in a single-cell scale. Core provides multiplex analysis to quantify RNA expression in bulk (NanoString nCounter) and single-cell proteomics (IsoPlexis-Bruker). Our laboratory has a dedicated space for cell culture, and sample preparation providing all instruments necessary to work with tissue dissociation and single-cell isolation (Via Extractor).

- Consultation
- Experiment planning
- Tissue dissociation, single-cell isolation
- Multiplex analysis
- Spatial transcriptomics and proteomics analysis
- IF analysis (DAPI + 5 colors)
- Lab support services

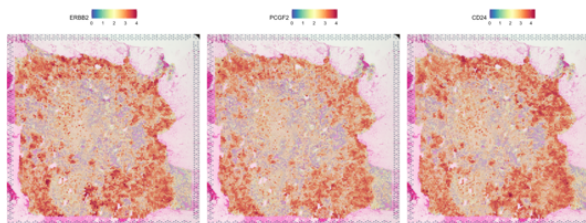
## Instrumentation

### Multiplex Analysis:

- **NanoString nCounter**  
Highly reproducible expression data on 800+ targets and custom panels
- **IsoPlexis**  
Single cell resolution multiplex ELISA system, monitoring more than 30 cytokines at the same time

### Spatial Analysis:

- **NanoString CosMx SMI**  
High-plex in situ multi-omics analysis. Monitoring 64-120 proteins and 1000-6000 transcripts on one slide.
- **10x Genomics Visium HD**  
Two 6.5 x 6.5 mm Capture Areas with a continuous lawn of oligonucleotides arrayed in ~11 million 2 x 2 µm barcoded squares without gaps
- **Hyperion XTi**  
Simultaneously and reliably acquire 40-plus protein and RNA markers, without autofluorescence interference



*The SBC will add*

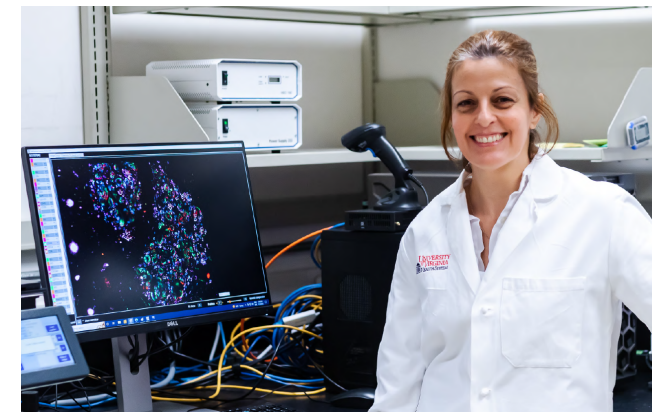
*another dimension  
to your research.*

**Enhancing Research,  
Rigor and Reliability**

## Our Team

**Ana Karina de Oliveira, PhD**  
Assistant Professor of Pathology  
Director

**Natalia Dworak, MS**  
Assistant Director



## Contact

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SBC Website:  
[med.virginia.edu/core-facilities/spatial-biology-core](http://med.virginia.edu/core-facilities/spatial-biology-core)

Request services on:  
[uva.corefacilities.org/account/login](http://uva.corefacilities.org/account/login)

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