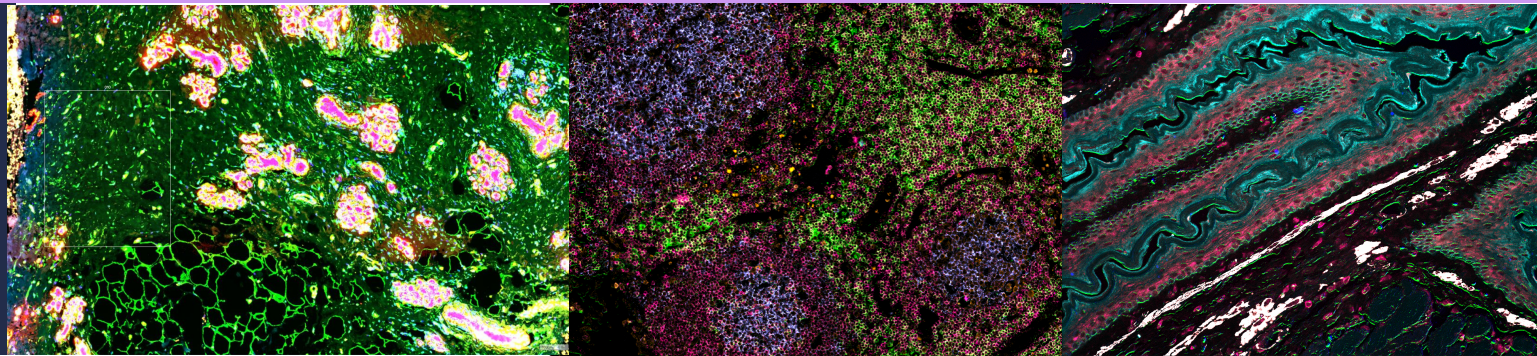


Spatial Biology Core

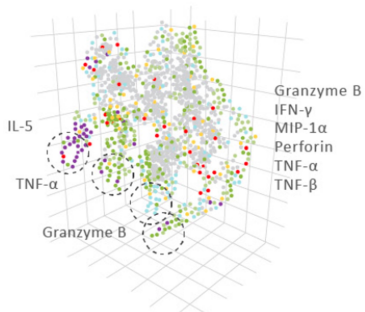


About Us

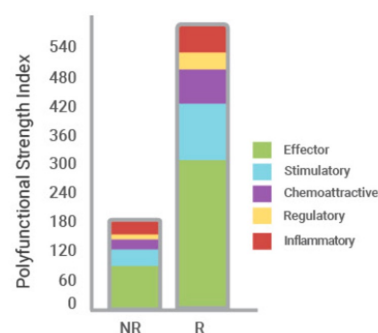
Spatial Biology Core (SBC) was launched in July 2022 to bring the most modern research for studying cellular and molecular interactions in the spatial context of tissues and organs.

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.

PINPOINT THE BIOLOGICAL DRIVERS



Polyfunctional Strength Index: PSI = Polyfunctionality x Intensity



Our Services

The SBC provides expertise in spatial profiling of biological samples. Techniques and instrumentation provided by SBC can help map spatial architecture of cells and tissues. Core support experiments in spatial transcriptomics and spatial proteomics.

- Consultation
- Experiment planning, design and execution
- Workshops and Seminars to present new technology
- Sample preparation for single cell experiments
- RNA extraction
- Multiplex analysis
- Spatial transcriptome analysis

Lab Support Services:

- Mouse/Human sample preparation
- Stem cell cultures
- Organoids
- BSL2 Laboratory rental

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:

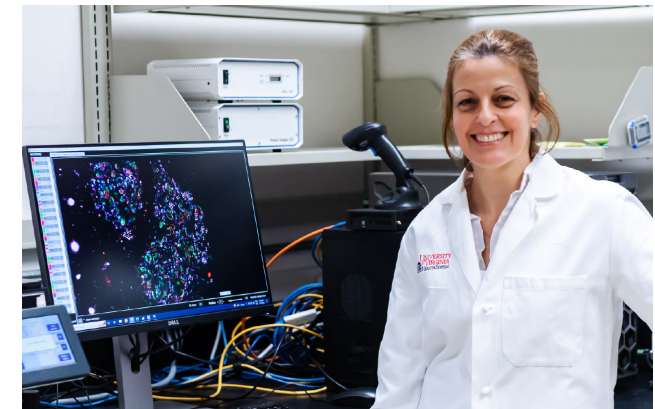
- NanoString CosMx SMI
 - High-plex in situ multi-omics analysis. Monitoring 64-120 proteins and 1000-6000 transcripts on one slide.
- NanoString GeoMx DSP [hosted by BTRF Core]
 - provides morphological context in spatial transcriptomics and spatial proteomics analysis
- Zeiss Jena - ChipCytometry
 - high-quality imaging combined with advanced imaging software enables truly quantitative analysis

High Content Imaging:

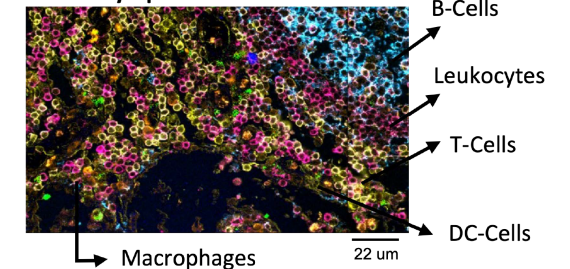
- Perkin Elmer Operetta CLS high-content imaging system
 - Confocal and non-confocal imaging
 - 8 LEDs Excite

Our Team

Ana Karina de Oliveira PhD - Director
Assistant Professor of Pathology



Human Lymph node



Contact

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Phone: 434-924-1753

SBC Website:
med.virginia.edu/core-facilities/spatial-biology-core

Request services on:
uva.corefacilities.org/account/login

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Charlottesville, VA 22908

The SBC will add

*another dimension
to your research.*

**Enhancing Research,
Rigor and Reliability**

