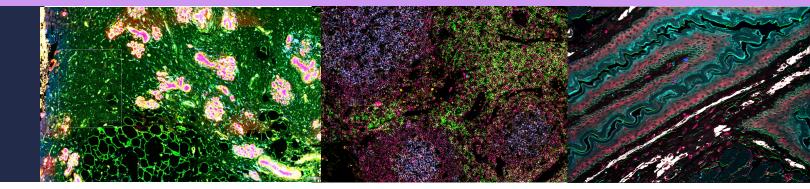
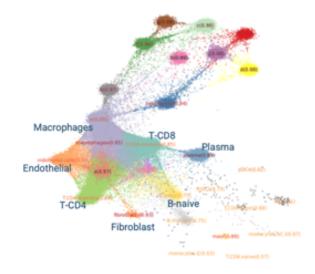
Spatial Biology Core



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

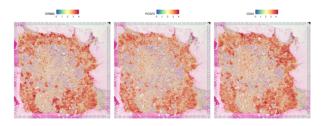
Multiplex Analysis:

- 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 transcritps 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.

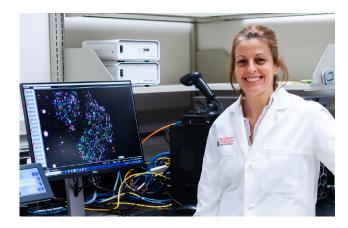
Enhancing Research, Rigor and Reliability

Our Team

Ana Karina de Oliveira, PhD Assistant Professor of Pathology Director

Natalia Dworak, MS Assistant Director

Yulica Santos Ortega, PhD Lab Specialist Intermediate



Contact

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

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