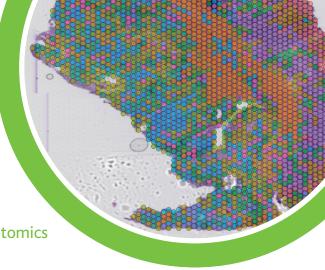




SpatialInnovation Initiative



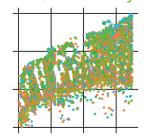
Pre-competitive effort to deliver harmonized spatial transcriptomics datasets quickly and cost effectively.

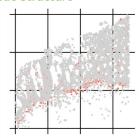
The use of single cell sequencing is having a profound impact on drug discovery. Complementary to scRNA-seq experiments, there are an increasing number of commercial platforms that facilitate spatially resolved, high-dimensional assessment of gene transcription, known as 'spatial transcriptomics'. This exciting technology allows scientists to explore the spatial context of gene expression, cell type composition, and tissue architecture.

The growing availability of spatial transcriptomics datasets offers researchers the opportunity to leverage this emerging data lake, however, spatial datasets come with significant hidden costs that hinder the ability of companies to exploit them to their maximum potential:

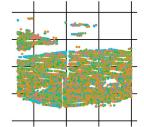
- No common standards exist for publishing spatial datasets
- Multiple technology platforms for generating spatial datasets
- It is both time consuming and laborious to find, download, and curate datasets into a consistent format to support integrated analysis

Healthy Tissue Structure





Diseased Tissue Structure





A PRE-COMPETITIVE OPPORTUNITY TO EMPOWER SPATIAL DATA ANALYSIS

- Greater numbers of harmonized spatial datasets than would be feasible by one company for a comparable level of investment.
- A coherent spatial data model, built upon Rancho's extensive experience.

Building on our experience in running the Single Cell Data Science consortium, Rancho has established the Spatial Innovation Initiative (SII) with three Charter Members, providing a pre-competitive, cost sharing forum and mechanism to help address these challenges.

BENEFITS OF MEMBERSHIP

- Cost sharing approach: a far superior ROI to what one company could achieve on its own. ROI will continue to grow as more Members join.
- Rancho can scale the effort much faster, and more cost effectively than a single company given its experience and expertise in building robust workflows/processes.
- Ability to interact regularly with like-minded peers at other companies, sharing common challenges faced with working with spatial datasets/technologies and advancing the field collectively.

MEMBERSHIP IN THE SPATIAL INNOVATION INITIATIVE

Rancho and our Charter Members in SII welcome the addition of more Members to help accelerate the delivery of harmonized spatial datasets, assist with surveillance and benchmarking of algorithms for analysis and implement algorithms prioritized by the Members. If you are interested in becoming a Member in SII please email services@ranchobiosciences.com





