



In February 2022, Rancho launched the Single Cell Data Science (SCDS) Consortium, a 3-year pre-competitive initiative, with 4 Charter Members. The goal is to deliver harmonized and analysis-ready single cell experiments, from publicly available sources, more quickly and cost effectively than a single company could support on its own.

Due to their enormous potential for advancing drug discovery, there continues to be an exponential growth in the use of single cell sequencing methods, with pharma/biotech companies continuing to invest in them. The availability of ever-increasing amounts of single cell datasets in the public domain allows pharmaceutical companies to dramatically expand their universe of single cell experiments over those generated internally. Leveraging this vast public data lake by finding, downloading, and curating single cell data is highly laborious and time consuming compared to the resources for collectively analyzing data by scientists to gain value for biomedical research.

YEAR 1 ACCOMPLISHMENTS

- Data Tracker Portal, populated with >4,000 publications
- SCDS Data Model - 4 entity, 75 attributes
- Inducted 2 additional member companies
- Datasets harmonized around the data model

BATCH	STUDIES	DATASETS	DONORS	SAMPLES	CELLS	PCT AUTHOR ANNOTATION
BATCH 1	23	27	326	746	2,680,147	29.9
BATCH 2	24	24	251	776	2,981,935	37.6
BATCH 3	31	38	426	810	4,625,096	22.8
BATCH 4	18	26	566	4553	7,509,710	76.8
TOTAL	96	115	1569	6885	17,796,888	49.1

FOCUS IN YEAR 2 (ENDING FEBRUARY 2024)

In addition to continued harmonization of large numbers of publicly available single cell datasets, Members have also prioritized their interest in areas including:

- Consensus Cell Type Annotation from multiple reference-based and ML tools.
- Creation of tissue and disease-specific reference atlases from harmonized dataset content
- Expanded addition of Multi-modal datasets

BENEFITS OF MEMBERSHIP

New members will receive all Year 1 deliverables upon joining and then be able to participate in prioritization of future batches for Year 2, depending on when they become Members. This is a true cost sharing approach, with far superior ROI to what one company could achieve on its own. ROI will continue to grow as more Members join.

Ability to interact regularly with like-minded peers at other companies, in a pre-competitive manner, to share common challenges faced in working with single cell datasets and how SCDS can help to advance the field together and deliver value to each Member.



CONSORTIUM MEMBERS



MEMBERSHIP IN THE SINGLE CELL DATA SCIENCE CONSORTIUM

New members are welcome to join the consortium, please email Services@RanchoBioSciences.com if you are interested in becoming a member.



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