San Diego Nathan Shock Center (SD-NSC) Resources

The San Diego Nathan Shock Center (SD-NSC) offers a wide range of analytical services, instrumentation, and integrative analysis for investigating the heterogeneity of aging. Our offerings are now available at the San Diego Nathan Shock Center (SD-NSC)'s website.

Heterogeneity of Aging

The overarching goal of the SD-NSC Heterogeneity of Aging Core is to enable investigations into the heterogeneity of aging over a broad range of scales (from molecules to organelles to single cells and tissues) by providing access to a diverse suite of analytical technologies. Major resources offered include the ability to:

- Obtain single-cell sequencing for transcriptomic and epigenetic analysis, high-end mass spectrometry services, and multimodal, high-resolution imaging for the analysis of the heterogeneity of cell and tissue aging studies.
- Receive advice on experimental design and high-resolution analysis related to single-cell transcriptomic and epigenetic approaches, and proteomic and metabolomic techniques with enhanced spatial and temporal resolution.
- Develop and disseminate novel methods and protocols, including artificial intelligencebased image processing algorithms.

Services and prices

• Click here for details

Integrative Models of Aging

The overarching goal of the SD-NSC Integrative Models of Aging Core is to facilitate the integration and interpretation of large and complex datasets from single-cell sequencing, proteomic, imaging, and other multi-dimensional analyses related to the heterogeneity of aging. The resources offered include ways to:

- Identify and implement the hardware and software resources required to pre-process and store sequencing, proteomics, metabolomics and imaging data.
- Implement integrative computational models to map diverse pre-processed data inputs into interpretable models of the heterogeneity of aging. This will include fulfilling requests to apply established techniques for the integrative analysis of data, and developing customized predictive computational models as tools for answering specific aging questions.

Services and prices

• <u>Click here for details</u>