

## FACILITIES AND RESOURCES – Data Science Core

---

The mission of the USC Norris Comprehensive Cancer Center (NCCC) Data Science Core (DSC) is to provide integrated state-of-the-art biostatistics and informatics support for cancer research spanning basic to translational and clinical studies, and cancer etiology to cancer control. DSC works with NCCC investigators on the design, data accession and integration, conduct, analysis, and reporting of cancer research. DSC also plays a central role in clinical protocol review and study monitoring for the Clinical Investigations Support Office (CISO). By developing long-term collaborative relationships with members in all NCCC Research Programs, DSC members are highly integrated into all aspects of NCCC research.

### Key Services provided by DSC:

- Assist with study design for cancer-related laboratory, clinical, and observational studies.
- Develop statistical designs, analytic plans and corresponding write-ups in support of grant applications.
- Ensure the proper conduct of clinical trials and data integrity.
- Implement and develop reports for clinical trials within CISO (oversee Forte OnCore and Medidata Rave).
- Provide informatics support to enable data capture, data wrangling, and data management, including database design and development.
- Serve as the data-pipeline hub for a study from data generation to final biostatistical analyses, noting that initial data processing may be performed in collaboration with other SRs (e.g. bioinformatic analysis for variant calling from sequence data within the Molecular Genomics SR).
- Provide custom programming for data unification and cluster computing.
- Apply appropriate statistical analyses and modeling strategies, with preparation of tables and figures for data (including post-processed omics data) for manuscripts, grants, and clinical trials).
- Participate in the Clinical Investigation Committee (PRMS) and Data and Safety Monitoring Committee (DSMC).
- Participate in educational and training activities for the NCCC.