

The CRSC biostatistical core includes four PhD-level faculty biostatisticians, one PhD-level faculty epidemiologist, and one Masters-level staff biostatistician. These staff have broad experience for assisting and collaborating with principal investigators (PIs) on a range of topics: design and analysis of epidemiological studies; design and analysis of intervention/clinical trials; design and evaluation of forms and questionnaires to be used in collecting study data (Qualtrics is available for all Wayne State faculty); graphically summarizing data; power analyses and sample size assessment; analysis of high-dimensional data; analysis of genomic data (e.g., next-generation sequencing, microarrays); analysis of longitudinal and survival data; issues related to missing data, biased sampling, and causal inference; analysis of spatial and geographical data; design and analysis of sample surveys; prediction and forecasting; and data mining. CRSC staff work with PIs in all phases of research studies including planning studies, preparing grant applications, analyzing data, and presenting data. CRSC staff have a wealth of computational resources available that includes high-end desktops (Xeon-based workstations), low level programming languages (C++/VC++/FORTRAN) and access to the high-performance computing grid. The CRSC has several data management tools available, including REDCap and Oncore. CRSC staff also have experience with an array of software: SAS, R, SPSS, STATA, and Matlab.