

Services provided by the Mozell Core Analysis Lab

Assistance with study design:

- Developing research questions with consideration of study design, variables, and outcomes.
- Preparing research proposals with identifying the appropriate statistical analyses that address research questions.
- Estimating sample sizes and calculating statistical power.
- Performing randomization techniques for experimental studies and clinical trials.
- Preparing statistical section of grant proposals.
- Supervising the execution of study and collection of data, as appropriate.
- Assistance with data management:
- Consulting for data entry, data checking, coding and data formatting.
- Executing data manipulation, data extraction, data linkage, and data cleaning.
- Consulting in and executing the transformation of data, data re-coding, etc. as required for statistical analysis.

Assistance with data analyses and interpretation:

- Executing data analyses, producing statistical reports and interpretation of results.
- Preparing, creating, and implementing statistical analyses plans based on research objectives.
- Consulting with statistical programming and coding, data analyses checking and validating.
- Selecting statistical software, statistical methods, and interpretation of error messages in complex analyses.
- Assistance with research results presentations and publications:
- Creating tables and figures to present results for publications and reports.
- Developing quality graphics and plots for publications and presentations.
- Writing and editing statistical analysis section for manuscripts, conference presentations, and research project reports.
- Revising journal manuscripts related to statistical analysis responses.

Assistance with training/mentoring junior data analysts:

- Enhancing programming skills for performing advanced statistical analysis methods for innovative medical studies
- Providing skill enhancement training for large database manipulation, data linkage, data cleaning and quality assurance techniques.

Frequently Asked Questions

What types of services can the Mozell Core Analysis Lab provide?

- A. Basic consultation: One or two meetings to provide services such as research design guidance, data management and preparation, statistical analyses, presentation development and results interpretation.
- B. Detailed consultation: Meetings to provide statistical analysis, results interpretation, table and graph development, results presentations, performing complex statistical analysis, and checking and validating analyses results.
- C. Project data analyses: Support provided to produce final statistical reports for a full research project.
- D. Report development: Inviting MFACL staff consultants to be research team collaborators. Their efforts will contribute to the research design, data management, analysis, and production of final reports.

Services A and B require approval by the Mozell Core Analysis Lab Committee

Who is eligible?

All primary members of Libin Cardiovascular Institute of Alberta, including faculty, staff and students are eligible for these services.

What kinds of projects are available?

Any scientific and educational research project within the Libin Cardiovascular Institute of Alberta is eligible for this service, including:

- A. Grant proposals
- B. Journal articles
- C. Conference presentations/abstracts
- D. Response to reviewers
- E. What statistical software is used? The software we use depends on the statistical needs and preferences of the researchers. We are most experienced with the statistical software of SAS, SPSS, and R.

How much does the service cost?

Costs are covered by the Libin Institute.

How do we recognize the statistical consulting contribution?

It is appropriate to recognize the role of the statistical consulting service provided by the staff at MFACL when working on the project warrants. This can range from acknowledgement to co-authorship. Co-authorship is appropriate only when the consultant provides significant input on the final research product.