

Introduction

The Biostatistics Consulting Center at the University of Massachusetts Amherst (BCCUMA) operates within the Division of Biostatistics and Epidemiology of the Department of Public Health, in the School of Public Health and Health Sciences. It has access to a broad range of expertise in modern statistical practice to address all areas of research by drawing upon faculty within the School of Public Health and Health Sciences and in departments across campus.



The size, scope, nature and level of funding of research consulting projects conducted through the BCCUMA vary widely. Our activities range from the basic statistical analysis of small existing data sets to data coordinating center support of complex

data management and statistical analyses for grant-funded, multi-center projects. Projects requiring various levels of support in the form of both technical and human resources are welcome. The BCCUMA provides collaboration, sharing of technical resources and expertise.

The BCCUMA is organized into three integrated units:

- Grant and Project Development
- Project Management and Analysis
- Statistical Consulting and Education

Grant and Project Development

The BCCUMA provides consultation on study objectives and design, statistical methodology, data collection planning and management, power calculations to determine appropriate sample sizes, and quality control for research protocols and grant applications. The BCCUMA will also help write statistical methods sections when necessary.

Project Management and Analysis

The BCCUMA can support all areas of research, from initial proposal development and study design through statistical analysis and reports.

Support is available for the design of data collection instruments including paper questionnaires, scannable forms, computer assisted telephone interviews (CATI), or web-based surveys.

The BCCUMA also provides data collection and data entry services. Data collection formats supported include on-site or telephone interviews, mailings, web-based surveys and record abstraction. We also can access and download existing files from corporate or government sources from the World Wide Web, and provide the expertise for manipulating and interpreting these data.

Once data are in hand, the Project Management and Analysis Unit offers complete support for data cleaning, management, and documentation of all of these processes. We support manuscript, report and presentation development, including statistical analysis, interpretation of results, and collaboration on writing.

In addition, the BCCUMA provides expertise in creating and managing project web-sites for the purpose of sharing information and facilitating management of multi-center projects.



Statistical Consulting and Education

The BCCUMA provides consulting for student research and other projects not related to grants. In conjunction with the Office of Information Technology, we offer training in the use of statistical software packages, such as SAS, SPSS, and Minitab.

Expertise of Affiliated Faculty

- Multi-center clinical trials
- Evaluation of community assessment and intervention projects
- Complex survey analysis
- Bayesian statistics
- Meta-analysis
- Interim power considerations
- Methodology for adjusting for missing data and measurement error
- Mixed models for longitudinal data analysis
- Observational studies, e.g., analyses of administrative data

Affiliated Faculty

Biostatistics

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BIostatistics Consulting Center

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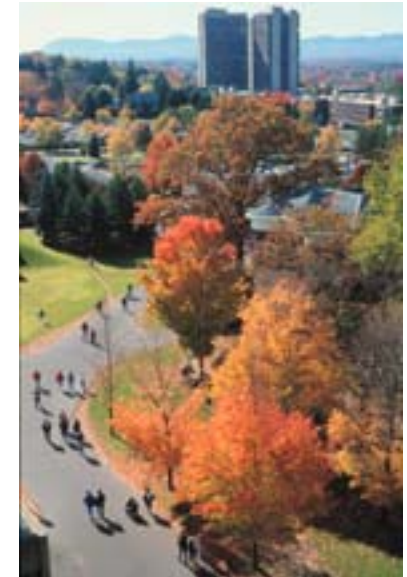
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