



CFAR Design & Analysis Core: Services Provided

Service/Function	Description of Service/Function
Study Design Services	
Sample size calculations	Sample size and power calculations Interpretation and presentation of sample size results Training on the use of sample size/power software
Development of data collection tools	Assist with development of data collection instruments Provide guidance on defining study variables from an analytic perspective and coding for analysis Assist with pilot testing and refining new instruments
Survey development	Assist with identifying validated survey instruments Provide guidance on development and validation of new survey items Assist with pilot testing survey Analysis of survey data/psychometric analysis
Randomization schemes	Electronic generation of randomization lists for clinical trials Training on using software for generating randomization lists
Intervention development	Assist with all aspects of intervention development and testing
Study design	Determine most appropriate study design Offer guidance on inclusion and exclusion criteria Offer guidance on study recruitment issues Identify potential sources of bias and confounding Provide guidance about development of study/procedure manuals
Data Management Services	
Prepare study data for analysis	Data cleaning Identify missing data Create study variables for analysis
Instruction/assistance with procedures for design, development and maintenance of study-specific databases	Discuss software available Provide Manuals of Procedures for databases Create Excel or ACCESS databases for data entry
Epidemiologic/Statistical Analysis Services	
Development of statistical analysis plan	Determine most appropriate statistical analysis plan Assist with writing statistical analysis section for grant applications Assist with preparation and presentation of pilot data for grant application
Conduct statistical analysis	Conduct univariate and multivariate analyses. Techniques included but not limited to : descriptive analysis, t-test, chi-square, ANOVA, repeated-measures ANOVA, Odds ratios, Risk ratios, survival analysis (Kaplan-Meier, Poisson), logistic and probit regression, Multiple regression, Cox regression, generalized estimating equations, Random Effects Models, Fixed Effects Models, Maximum Likelihood Estimation, Generalized Linear Models Offer mentoring on statistical analysis techniques Provide formal report of study results
Data interpretation	Review results and provide guidance on appropriate data interpretation Suggest use of alternative techniques as appropriate
Formal Collaborations	
Mentor	Serve as a listed methodology mentor on a Career Development Award application
Co-investigator/Consultant	Serve as listed Co-investigator/consultant on grant application

Jessica A. Davila, Ph.D.,
Core Associate Director
 Phone: (713) 794-8699; Fax: (713) 748-7359
 E-mail: jdavila@bcm.edu