HEALTH RESEARCH METHODOLOGY BOOT CAMP *WITH* EPI INFO TRAINING

TIME	Day 1	Day 2	Day 3	Day 4	
09:00 - 09:30	Orientation & pre-test	Sampling methods Sample size calculations Randomization and blinding	**T test:** Independent and paired t-tests, confidence intervals	Correlation Regression Transformation of data	LECTURE SESSIONS
09:30 - 10:00	Research strategies and designs				
10:00 - 10:30	Descriptive, cross-sectional, case-control, cohort, experimental designs.	Non-parametric tests: χ^2, χ^2 for trend, McNemar χ^2, χ^2 with Yates correction, Fisher exact test	Analysis of variance	Logistic regression Survival Analysis	
10:30 - 11:00	Variables, scales of measurement				
11:00 - 11:30	Descriptive statistics (averages, standard deviation, standard error, variance)	Epidemiological statistics (incidence, prevalence, odds ratio, relative risk, absolute risk reduction) Sensitivity, specificity, kappa (κ) statistic	Cluster sample design and analysis	Creating graphs in Excel Random number generation Paired t test	
11:30 - 12:00	Normal distribution and hypothesis (significance) testing, type I & II errors				
12:00 - 1:00	*BREAK / STATISTICAL CONSULTING SESSIONS*				
01:00 - 01:30	Installing Epi Info Principles of questionnaire design	**Data entry:** Entering data	**Data management:** Read data, list, sort, select, set option. Frequencies, means, tables. Define new variables, recode data, IF statements, data calculations	**Statistics II:** t test, ANOVA, graphs, multiple linear regression, transforming data. Writing and using programs. Creating new data tables	PRACTICAL SESSIONS
01:30 - 02:00					
02:00 - 02:30	Creating data entry tools with Epi Info Form Design	**StatCalc /Open Epi:** 2x2 contingency tables Sample size calculations χ^2 for trend.			
02:30 - 03:00			**Statistics I:** Confidence intervals for proportions Stratified analysis Matched analysis	**Statistics III:** Logistic regression Survival analysis	
03:00 - 03:30	Validating data entry	Creating a relational database, merging records. Creating grid fields			
03:30 - 04:00				Post-test and evaluation	
04:00 - 04:30	*STATISTICAL CONSULTING SESSIONS*				