Short-stay Study Abroad Program Report Vanessa Rocio Bracamonte Lesma School of Multidisciplinary Sciences, Department of Informatics

The Inter-University Consortium for Political and Social Research (ICPSR) Summer Program is an intensive seminar in statistical methods. The program is held every year at central campus of the University of Michigan, USA. Students from all over the world go every year to learn the advanced statistical techniques and methods needed for research.

The program was recommended to me by my advisors, for learning the statistical methods that I would require for the correct analysis of data in my research.

The ICPSR Summer Program is divided into two sessions. I attended the first session, from June 18th until July 13th. Each session offers workshops and lectures, and the students must decide which are the most appropriate for their purposes and register for them.

The workshops are 2 hours each and there are classes every day. I registered for 3 workshops (Advanced Multivariate Statistical Methods, Introduction to Applied Bayesian Modeling, and Network Analysis) and 1 lecture (Introduction to the R Statistical Computing Environment).

In the first workshop, Advanced Multivariate Statistical Methods, they taught us multivariate distributions and methods, such as principal components analysis, discriminant analysis, and factor analysis. The Introduction to Applied Bayesian Modeling for the Social Sciences workshop presented the theory and applications of Bayesian statistical analysis, and the usefulness of these methods in situations where classical statistical analysis has problems, such as when there is missing data or complex distributions.

In the Network Analysis workshop we learned how to describe and analyze the relationships between social actors or entities. This workshop included an introduction of network-related concepts such as centrality, equivalence, subgroups and clique; and how they are applied in research. We also learned about the software tools used for mapping and analyzing the relationships in the network.

In the Introduction to the R Statistical Computing Environment lecture we learned about the statistical software R, which is free and very flexible program for doing statistical analysis and programming.

In addition to the workshops and lectures there were some lectures on special topics that I also attended. They were "Forecasts for the 2012 Presidential Election", which discussed a model for the prediction of the USA elections, and "Meta-Analysis for the Social Sciences", which was about statistical techniques for meta-analysis of studies.

The class schedule is very intensive, so there is little free time. But the administration of the program organizes bi-weekly picnics for the students and lecturers to relax. There is also opportunity to network with other students, while attending the classes and doing homework.

All classes are given in English, and so a good level of English language is required.

Apart from the difficulty of the classes, the program is itself very challenging because of the heavy schedule, so that by the third week of classes everyone was very tired and by the fourth week it is very difficult to keep the focus. Nevertheless, the classes and the lecturers are all very high quality, interesting and enthusiastic about their subject, and that helps to remain motivated until the end

My advice for future applicants is that they should look through the syllabus of the courses that are offered before going, and read ahead as much as they can of the subject, to take advantage of the classes.