## 6<sup>th</sup> International Conference on BIOSTATISTICS AND BIOINFORMATICS

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## Parametric regression analysis for Biostatisticians

This short course is designed to provide some of the advanced and common statistical techniques for researches and practitioners. The short course will demonstrate the parametric simple and multiple linear regression models, Logistic regression, Poisson regression, ZIP Poisson regression models and their applications in Biostatistics, Medical, Biology, Business, Mass Communication, Engineering, public health, Epidemiology, pharmaceutical and biomedical fields. These examples and case-studies will be implemented using the SPSS and SAS. Attendees will learn concepts, techniques and some secrets about the followings: How to use the F-test to determine if your predictor variables have a statistically significant relationship with your outcome/response variable? What are the assumptions for linear regression analysis and what you should do to meet these assumptions? Why adjusted R2 is smaller than R2 and what these numbers mean when comparing between several models? For which predictors are the regression coefficients significantly different than zero and how can you select the significant variables? What is the difference between regression and ANOVA and when are they equivalent? When and how to use the Generalized Linear Models with some examples? How to select the best model? What is the general strategy to approach any modeling problem? How to report the results in your research paper/report?.

## **Biography**

Abdel-Salam Gomaa holds BS and MS (2004) degrees in Statistics from Cairo University and MS (2006) and PhD (2009) degrees in Statistics from Virginia Polytechnic Institute and State University (Virginia Tech, USA). Prior to joining Qatar University as an Assistant Professor and a Coordinator of the Statistical Consulting Unit and Coordinator for the Statistics Programs, he taught at Faculty of Economics and Political Science (Cairo University), Virginia Tech, and Oklahoma State University. Also, he worked at JPMorgan Chase Co. as Assistant Vice President in Mortgage Banking and Business Banking Risk Management Sectors. He has published several research papers and delivered numerous talks and workshops. He has awarded couples of the highest prestige awards such as Teaching Excellence from Virginia Tech, Academic Excellence Award, Freud International Award, and Mary G Natrella Scholarship from American Statistical Association (ASA) and American Society for Quality (ASQ), for outstanding graduate study of the theory and application of Quality Control, Quality Assurance, Quality Improvement, and Total Quality Management. He is a Member of the ASQ and ASA.

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