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	Nota di contenuto	Preface -- An Appreciation - John Nelder, FRS -- Introduction -- Survival Modelling: Hougaard - Multivariate Interval-Censored Survival Data: Parametric, Semi-Parametric and Non-Parametric Models; MacKenzie and Ha - Multivariate Survival Models Based on the GTDL; Lynch and MacKenzie - Frailty Models with Structural Dispersion; Martinez and Hinde - Random Effects Ordinal Time Models for Grouped Toxicological Data from a Biological Control Assay -- Longitudinal Modelling & Time Series: Haywood and Randal - Modelling Seasonality and Structural Breaks: Visitors to NZ and 9/11; Allais and Bosco - Forecasting the Insolvency Risk of the Customers of an Automotive Financial Service; Xu and MacKenzie - On Joint Modelling of Constrained Mean and Covariance Structures in Longitudinal Data -- Statistical Model Development: Payne - Hierarchical Generalized Nonlinear Models; Durio and Isaia - Comparing Robust Regression Estimators to Detect Data Clusters: A Case Study; Coffey, Hinde and Garcia - Finite Mixture Model Clustering of SNP Data; Peng and MacKenzie - Discrepancy and Choice of Reference Subclass in Categorical Regression Models -- Applied Statistical Modelling: Ramsey - Statistical Methods for Detecting Selective Sweeps; Brophy, Gibson,

Wayne and Connolly - A Mixture Model and Bootstrap Analysis to Assess Reproductive Allocation in Plants; Conde and MacKenzie - On Model Selection Algorithms in Multi-Dimensional Contingency Tables -- Postscript: Durio and MacKenzie - Obituary: Professor Ennio Isaia.

Sommario/riassunto	This book presents selected papers on statistical model development related mainly to the fields of Biostatistics and Bioinformatics. The coverage of the material falls squarely into the following categories: (a) Survival analysis and multivariate survival analysis, (b) Time series and longitudinal data analysis, (c) Statistical model development and (d) Applied statistical modelling. Innovations in statistical modelling are presented throughout each of the four areas, with some intriguing new ideas on hierarchical generalized non-linear models and on frailty models with structural dispersion, just to mention two examples. The contributors include distinguished international statisticians such as Philip Hougaard, John Hinde, Il Do Ha, Roger Payne and Alessandra Durio, among others, as well as promising newcomers. Some of the contributions have come from researchers working in the BIO-SI research programme on Biostatistics and Bioinformatics, centred on the Universities of Limerick and Galway in Ireland and funded by the Science Foundation Ireland under its Mathematics Initiative.