# Event History Analysis

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This series of talks provides an overview of the major developments in event history methodology from the famous Cox (1972) paper to the present day. We start with an introduction to survival data and the issues raised by censoring of various kinds. Parametric models are briefly reviewed before the Cox proportional hazards model andassociated partial likelihood are discussed. We then turn to counting process methodology and show how this powerful approach can be used both to provide the theoretical underpinning of standard techniques and estimators and to allow easy extension beyond the simple survival time setting to more complex event history patterns, such as recurrent events with intermitent observation. Further developments to be discussed include frailty models, diagnostic methods, cure models, relative survival, Aalen's additive approach and case-control techniques for survival data. Recently proposed semiparametric and nonparametric alternatives to the Cox model will be described together with necessary estimating equation methodology. The series ends with discussion of linkages between methods used in event history and longitudinal data analysis.