



2016

LECTURES & SEMINARS

04

APR. 2016
Monday

SEMINAR

Edison Building –
Room Sanger Snow
5.00 - 7.00 pm



SPEAKER

Prof Peter McCullagh

Professor, Department of Statistics,
University of Chicago, U.S.

HOST:

Prof Stephen Senn
(stephen.senn@lih.lu)

VITAL VARIABLES AND HEALTH SEQUENCES

ABSTRACT

The focus of a survival study is partly on the distribution of survival times, and partly on the health or quality of life of patients while they live. Health varies over time, and survival is the most basic aspect of health, so the two aspects are closely intertwined. Depending on the nature of the study, a range of variables may be measured; some constant in time, others not; some regarded as responses, others as explanatory risk factors; some directly and personally health-related, others less directly so. We begin by classifying variables that may arise in such a setting, emphasizing in particular, the mathematical distinction between vital variables, non-vital variables and external or exogenous variables. The goal is to construct a family of continuous-time stochastic process for vital health variables, and to use such models for the analysis of data collected intermittently in time, especially in situations where mortality is appreciable.