

**Designing longitudinal surveys to represent both longitudinal and cross-sectional populations, Peter Lynn (Institute for Social & Economic Research, University of Essex, UK) ;**

**Discutant: Nicolas Razafindratsima (INED)**

The presentation will discuss definitions of target populations for longitudinal surveys and sample designs to achieve representation of those populations. The primary aim of longitudinal surveys is to enable study micro-level change of one kind or another. By definition, such change takes place over time. Therefore a sample of such changes, or of units experiencing such changes, must represent a population defined in time. A fundamental question for longitudinal studies is therefore how to incorporate the time dimension into the population definition. A number of options exist, each with different implications for analysis and for survey design and implementation. We will discuss the merits and implications of alternative designs. Some, but not all, of these alternative designs require the survey sample to retain cross-sectional representativeness over time. But even in the absence of such a requirement, there is often pressure for a longitudinal survey to be able to provide cross-sectional estimates in addition to the core longitudinal analysis. Thus, a secondary challenge for longitudinal surveys is to maintain cross-sectional sample representativeness in the context of a dynamic population. Key considerations include the need to correctly identify members of the initial sample who leave the population and the need periodically to add appropriate samples of people who join the population. The samples to be added should have known selection probabilities and should strike an appropriate balance between precision of estimation and cost-efficiency of fieldwork.