Abstract
Bone measurements of e.g. the skull and long bones have been used in anthropological studies for a very long time. They are especially used for grouping various samples over time and space as well as in studies of adaptation to various environments. Grouping and adaption cannot always be clearly separated which will be illustrated with examples from the arctic (Greenland) and the Mesolithic/Neolithic periods.

Bone measurements can also be used for evaluation of sex. However, various characteristics related to shape, especially of the pelvic bones and skull are even more reliable. While the age of subadult skeletons can be determined accurately by observing the dental development and eruption, as well as the size and fusion of various epiphysis, the age determination of adult skeletons is much more problematic and related to various aspects such as the pattern of ageing in the specific population, food types (wear of teeth) and physical load etc. Furthermore, changes of the ribs and auricular surfaces are also included in palaeodemographic studies of the past populations.

Introduction
Methods commonly applied in studies of morphological changes and variability of the human skeleton throughout history will be included in the plan. Understanding how bone reacts to external and internal influences, such as growth, ageing, hormones, diseases, physical activity, mechanical, nutritional and environmental stress is crucial.

The session will include a discussion of the function of bone, bone as a living tissue and the patterns of bone reaction. The diagenetic (post mortem) changes of bone that depend on various preservation conditions in soil, types of burial, climate, as well as the process of fossilization will also be discussed and illustrated with slides.

Measurements
A short historical introduction will be given of the background and methods used for measuring skulls and the interpretation of the measurements and indices throughout time. The practical part of this session will include a demonstration of the definition of anthropometric landmarks and a discussion of their value and possible interdependence. The same procedure will be followed for discontinuous (non-metric) traits, and possible environmental/genetic effects on some of the measurements and traits will be discussed.

The calculation of stature from the available methods (regression formulas) has long been a point of contention. It has been argued and also proven that the current methods cannot be used indiscriminately on all populations. Stature will be used as an example in a discussion of the relevance and variability of measurements.

The practical part of the programme will include measurement methods, discontinuous traits, and the results will be used to analyse and evaluate inter- and intra-observer discrepancies.

The session will end with a discussion of the interaction between environmental and genetic effects on the measurements. Data from different geographical areas and eras will be used as examples in relation to cultural and ecological aspects.

Demography
Methods related to demographic studies will include a review of the principles, reliability and background of old and new methods used for sex and age determination.

This will be followed by a practical training program of determining the sex of adult and immature skeletons. The student's results will be used to evaluate inter- and intra-observer differences and the session will end with a discussion of the problem of sex dimorphism throughout history. Sex distribution of large skeletal collections will be used as examples.

Old and new methods for age determination of adult and immature skeletons will be demonstrated. A discussion of the differences between chronological and biological age and the pattern of ageing throughout time will be included. The age distribution of large skeletal collections will be used as examples.

The discussions on the above mentioned topics will be relatively short due to the time limitations. The purpose of this programme is rather to expose the participants to new impulses, provide them with a basis for discussion and give them an understanding of the importance of critical evaluation of data from skeletal studies.