

## Memorandum of Understanding

following the special workshop on aDNA in Early Medieval Archaeology at the 64.  
Sachsensymposion, Paderborn, 7 September, 2013

The *Internationales Sachsensymposion* (SaSy) is following with interest the positive developments in the retrieval and analysis of aDNA from human and animal skeletal remains, and has members engaged in archaeological research projects involving such data. SaSy recognises the high potential value of these data, and wishes to exert its best efforts to ensure the dissemination of awareness of that potential, together with practical advice on the collection and handling of samples.

### **Practical aspects**

SaSy encourages the creation and dissemination of a code of good practice for the collection and curation of samples for aDNA analysis.

Ideally, all analyses and results should be replicable and independently verifiable. Given that samples that are retrieved may be small, however, and with few aDNA laboratories available at present, this can be difficult to ensure in practice.

It is highly desirable that all aDNA results should be logged with unique codes, and be openly available to researchers in a manner equivalent to radiocarbon age determinations.

The excavation and handling of all human skeletal material to the standards appropriate for eventual aDNA analysis is not feasible. It is important therefore that fieldworkers should be able both to recognise when the conditions are favourable for such procedures, and to refer to an appropriate set of research goals to enable them to select sites and in some cases individuals for sampling (see **Research objectives**, below).

Where such criteria are met, the importance of coordinating aDNA data with data from other laboratory analysis (e.g. isotopic data), expert osteological observations (including sex, age at death, and heritable peculiarities), together with an expert archaeological—and sometimes historical—understanding of the context of the samples, must be stressed. This consideration must normally imply the need for interdisciplinary collaboration on projects. The necessity for aDNA research projects to include appropriately qualified archaeologists must be insisted upon; reciprocally, archaeologists undertaking research using aDNA data must ensure they are fully advised by an appropriately specialized scientist.

### **Research objectives**

Several distinct applications of aDNA data are noted:

It is to be expected that in the short- to medium-term future, packets of aDNA data will be produced from single sites and in some cases from local areas on a relatively small-scale and localised level, and that these results will gradually accumulate into a larger and more comprehensive data-set of which broader questions can be asked.

With individual packets of data of such a kind, however, the value of aDNA information on the history and characterisation of individual and local communities can be regarded as especially high. These data can provide unique information on the structure of relationships and genealogical lineage within the populations studied, which can in turn create a distinct relative-chronological framework for the archaeological finds.

Questions of historical demography on a larger scale will predictably attract a lot of attention and exercise considerable pressure, especially in the more popular response to and discussion of the retrieval and dissemination of aDNA data. It is anticipated that, in time, these data will be able to contribute substantial information on the much-debated questions of continuity or replacement of population in specific areas, on possible large-scale migrations, and on the impact of catastrophes such as epidemics or plagues.

SaSy notes with concern the likelihood of attempts drawing upon genetic science to interpret haplogroups in terms of simplistic characterisations of the history of peoples or nations. It recognizes the importance of responsible investigation of possible relationships between genetic signatures and aspects of grouping and identity, but is opposed to research projects that either explicitly or covertly seek to link aDNA data to uncritical characterisations of the past, and in particular any attempts to link a specific genetic code or haplogroup with an ethnic or racial label.

#### **Immediate agenda for the *Sachsensymposion***

There is a need to encourage better understanding of the structure of DNA and genetic haplotype trees amongst the scholars who make up the *Sachsensymposion*, and in practice SaSy must therefore be proactive in inviting suitable specialists, whose primary research interests may not be within the field of the *Sachsensymposion*, to contribute to its conferences.

Members of the *Koordinierender Ausschuss* with an interest in advancing this field of research are asked to identify themselves, and/or to help identify suitable contact persons on a national basis to serve as contact and liaison points for the exchange of information within the *Sachsensymposion* network.

Through these we shall seek to start, as soon as possible, the compilation of a register of aDNA research projects and data within the field of interest of SaSy—which will perhaps be best interpreted very broadly as the 1st millennium AD across Europe north of the Alps.

It is anticipated that members of SaSy will also be involved in meetings and initiatives of other research groups concerned with aDNA research, where they should be able, as appropriate, to report and express the views of the *Sachsensymposion*, and to gain new information to share with other interested members of the network. In the longer term we may therefore be involved in substantial international research projects based fundamentally upon this field of research.