Research with Egyptian Mummies A bioarchaeological approach to the past

Abstract

The thesis for a PhD by publication presents a number of different methodological approaches to mummy research. Several papers produced results related to various aspects of past life in Ancient Egypt. Most of these studies suffer from the same problems that have limited previous research involving ancient mummies: Either the mummies are still wrapped and could therefore not be sampled using invasive methods (e.g. in case of Kha and Merit) – or only parts of the body are preserved, limiting the possible applications and questions (e.g. Nefertari). Alternatively, the soft tissue is entirely decayed, leaving only the bones. In such cases, any disease affecting soft tissue or the skin and hair escapes our abilities of detection (e.g. Meresankh III).

Part 2 illustrates the possibilities and limitations of mummy research (explained in detail in the contribution). Most investigations have to be custom designed, as every individual case has its distinct particularities and limitations. Non-invasive investigations are normally possible and yield little risk, while sampling is not always possible or useful. Most challenging was the genetics, yielding practically no conclusive results, as related ancestry or kin are unknown or not yet investigated. For the time being, there is no strategy against this fact, only larger series of genetic profiles may reveal unknown family relationships.

The last part of the thesis highlights the importance of accurate dating and chronology for mummies in relation to the exclusion of false assumptions. The dating is further complicated by the still ongoing discussion of the chronological model itself (high or low).