**PROJECT DETAILS**

**Project Title**

The Hyksos in Egypt – Anthropology and population history

**Project Summary**

Introduction: The Hyksos, a Greek rendering of the Egyptian title ‘ruler of the foreign lands’, were a dynasty that exerted power over Egypt between c. 1640 and 1530 BCE, during the 2\(^{nd}\) Intermediate Period between the Middle and New Kingdoms, when Egypt was ruled by various dynasties in different parts of the Empire. Even though their capital, Avaris, which formed the basis of their operations from the eastern Nile Delta, has been discovered and meticulously excavated, the origin of the Hyksos is still disputed. Whilst scholarly opinion currently suggests a Levantine provenance, little is known about their seizure of power, their role in history, or their legacy, as this period is poorly represented in texts. Yet almost all that is known about the Hyksos is derived from this fragmented information, and the most immediate source material that relates to the people behind the Hyksos rule, their skeletal remains, has been largely neglected.

Rationale and aims: Therefore, this project will, as part of an ERC-funded grant, contribute to resolving this enigma by analysing the significant quantity of human remains from Avaris/Tell el-Dab’a and contemporary comparative sites in Egypt and the Levant that may be associated with the carriers of the Hyksos culture. In particular, the study aims to

- Create demographic profiles and establish patterns of morbidity among these populations,
- Investigate signs of trauma and activity-related skeletal features,
- Analyse skeletal and dental morphology to identify their biological affiliation through skeletal similarity and difference,
- Synthesise the results through biocultural analysis.

Methods: The project will employ a blend of conventional methods of analysis and sophisticated novel approaches to ascertain individual and group skeletal characteristics. Particular emphasis will be on the use of geometric morphometrics, the investigation of metric and non-metric (discrete) traits, and their processing with advanced statistical methods to allow, through analysis of skeletal form (shape and size), the identification of biological relatedness. The combination of those methodological approaches will introduce a novel element to the study of Egyptian and associated human skeletal remains.

Outcomes: Results of this project are expected to make major contributions to our understanding of one of the most elusive yet undeniably influential periods of Egyptian history. For the first time, the amount and expected quality of anthropological and archaeological information is available to be combined into a comprehensive explanation of the Hyksos period, whether we are looking at the tangible manifestations of an élite dominance or a full-scale expansion of a people to set foot in and rule over one of the largest empires of ancient times. Furthermore, our existing expertise in the contextualised analysis of human skeletal remains will be further enhanced through the prestigious collaboration with the Austrian Academy of Sciences.

**Academic Impact**

The research will have an impact on archaeology, anthropology, history and even related forensic studies. Understanding the physical evidence underpinning the biological affiliation of past societies and the reliability of associated historical accounts is key to investigating population history and how changes in society and technology
influenced the ways in which societies expand, gene flows unfold, and biological legacies can be traced.

We aim to publish the analyses in high impact journals appropriate to these academic areas, e.g. American Journal of Physical Anthropology, PLOS One, PNAS. The project will establish and consolidate Bournemouth’s position as a leading academic centre of research into the population history of the Near and Middle East and the development and implementation of a refined methodological repertoire for the contextual analysis of human skeletal remains.

The proposed research topic will establish close collaborative links with one of the centres of anthropological research of ancient Egyptian societies and create a southern research cluster with promising and yet unexplored synergies. It is envisaged that this will lead to the development of a REF 2020 impact case study.

Results will contribute to our understanding of population migration and expansion during a little-explored period of Egyptian history, and unravel the mechanisms of identifying the biological substrate of foreign rule and its eventual physical legacy.

### Societal Impact

Public and media interest in archaeology and human remains is unabated. How our ancestors lived and died during times of change is still relevant today, especially in the Near East, where on-going shifts in power relations and dominance regularly features in newspapers, the internet and TV. The proposed research will undoubtedly have a significant impact through the public interest it generates. Knowledge of this complex period of history, still enigmatic and often over-simplified, will be disseminated to a wider audience, helping to promote broader reflection on the causes and consequences of foreign rule and societal change.

The value of retention of human skeletal remains will be demonstrated and wider awareness of the research potential of archaeological human skeletal remains promoted in Egypt and the Near East. Egypt’s rich archaeological heritage will be promulgated, attracting further research and enhance the economically important tourism sector. Results are likely to form part of displays in the Egyptian Museum in Cairo. Research activities, collaborations and outreach will be fostered through the provision of public lectures and use of social media, alongside a production of popular articles and digital media.

### Training Opportunities

The successful candidate will be trained in latest morphometric techniques for the identification and assessment of human skeletal and dental variation, e.g. geometric morphometrics, biodistance analysis and associated advanced multivariate statistical methods. Workshops covering these areas are offered regularly in the UK and abroad, which will provide an excellent opportunity for the candidate to be introduced to the respective specialist networks.

### SUPERVISORY TEAM

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<tr>
<th>First Supervisor</th>
<th>Holger Schutkowski</th>
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<td>Additional Supervisors</td>
<td>Sonia Zakrzewski (Southampton)</td>
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Recent publications by supervisors relevant to this project


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<th>INFORMAL ENQUIRIES</th>
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<tr>
<td>To discuss this opportunity further, please contact Holger Schutkowski via email: <a href="mailto:hschutkowski@bournemouth.ac.uk">hschutkowski@bournemouth.ac.uk</a></td>
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<td>All candidates must satisfy the University’s minimum doctoral entry criteria for studentships of an honours degree at Upper Second Class (2:1) and/or an appropriate Masters degree. An IELTS (Academic) score of 6.5 minimum (or equivalent) is essential for candidates for whom English is not their first language.</td>
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<td>Additional Eligibility</td>
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<td>Applicants should have excellent skills in the analysis of human remains and be familiar with skeletal and dental variation. Experience and acquaintance with advanced statistical methods is desirable.</td>
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<td>Please complete the online application form by 17June 2016. Further information on the application process can be found at: <a href="http://www.bournemouth.ac.uk/studentships">www.bournemouth.ac.uk/studentships</a></td>
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