

Internet Appendix A33: Archaeology

Figure A33.1 Illustrative Pitch Template Example

This pitch is based on an archaeology research group at ANU studying remains in Cambodia. The website for the project is www.intheirbones.info. It's a broad pitch based on their multidisciplinary approach to analysing new skeletons found in Angkor.

Pitcher's name	Marita Smith	For category	Archaeology	Date completed	21/4/15
(A) Working Title	History in their bones				
(B) Basic Research Question	What is the physical and isotopic variability in skeletal remains over time in Cambodia?				
(C) Key paper(s)	<p>Domett, K., D. J. W. O'Reilly, and H. R. Buckley, 2011. Bioarchaeological evidence of conflict in Iron age Northwest Cambodia. <i>Antiquity</i>, 85, 441 – 458.</p> <p>Domett, K. and D. J. W. O'Reilly, 2009. Health in Pre-Angkorian Cambodia: a bioarchaeological analysis of the skeletal remains from Phum Snay. <i>Asian Perspectives</i>, 48, 56 – 78.</p>				
(D) Motivation/Puzzle	Cambodia is the birthplace of the Khmer civilization of Angkor, which dominated Southeast Asia for over 700 years before declining from the 15 th – 19 th century. Despite the impressive, well-known temples that testify to the greatness of this civilization, very little is known about the everyday life of its people, particularly their health, diet and population mobility. The recent discovery of new burial sites provides a wealth of new skeletal material for analysis that has not been utilized.				
THREE	Three core aspects of any empirical research project i.e. the “iDioTs” guide				
(E) Idea?	The newly excavated skeletal remains in addition to museum specimens provide a time-series of Cambodian life spanning 3000 years. A multidisciplinary analysis of the remains would enable the unprecedented characterisation of long-term trends in health, diet and population mobility in Cambodia.				
(F) Data?	<ul style="list-style-type: none"> - Archaeological excavation of new remains, and re-analysis of archived specimens held in museums throughout Southeast Asia. - Physical analysis of skeletal material (osteological – height, age, sex, evidence for disease) - Isotopic analysis (oxygen and strontium) to reconstruct diet components, and assess the degree of population movement - Radiocarbon dating to produce an accurate timeline across the skeletal remains 				
(G) Tools?	<ul style="list-style-type: none"> -Archaeological dig equipment, field accommodation, appropriate permits - Osteology laboratory - Isotopic analysis equipment, such as a thermal ionization mass spectrometer 				

	- Accelerator mass spectrometer for radiocarbon dating
TWO	Two key questions
(H) What's New?	This collection of skeletal material is unprecedented for this time period in Cambodia. It will allow the extensive documentation of everyday life in this area spanning approximately 3000 years.
(I) So What?	The data will provide a novel dataset for a time period currently not well understood. It will provide key information about socio-political organization, population mobility, general life expectancy, health and diet. This will be useful to museums, historians and archaeologists alike. On a broader scale, it will provide a baseline for comparison to excavations around Southeast Asia and beyond. Finally, it will inform future studies in this area.
ONE	One bottom line
(J) Contribution	The primary source of the contribution will be a new, multidisciplinary dataset describing 3000 years of Cambodian life.
(K) Other considerations	<p>Is Collaboration needed/desirable?</p> <ul style="list-style-type: none"> -Idea: no; -Data; yes –multi-institutional preferred -Tools; yes –representatives and funding from various institutions <p>Target journals – <i>International Journal of Osteoarchaeology</i>, <i>International Journal of Paleopathology</i>, <i>Anthropological Science</i>, <i>Antiquity</i></p> <p>“Risk” assessment:</p> <ul style="list-style-type: none"> -“no result” risk: low. The wide range of methods used should result in a comprehensive dataset even if several methods provide insufficient data. -“competitor risk”(i.e. being beaten by a competitor): low. A study of this size will necessitate a coordinated, international and multidisciplinary effort involving a wide range of researchers. -risk of “obsolescence”: Low. The development of early societies in Southeast Asia is of interest to government, museum curators, tourists and the general public.