



DEATH AT THE LATE MEDIEVAL PERIOD: THE LAGARES NECROPOLIS BIOARCHAEOLOGY LABORATORY PROJECT, LISBON (PORTUGAL)

Course ID: TBA

June 14 - July 11, 2020

Academic Credits: 8 Semester Credit Units (Equivalent to 12 Quarter Units)

School of Record: Connecticut College

FIELD SCHOOL DIRECTORS:

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Tuition for this field schools covers the cost of accommodations, daily lunch, health insurance, instruction, and cost of credit units. Students are responsible for purchasing their own breakfast, dinner and all meals during weekends.

Note that this program is laboratory based, examining one of the largest collections of archaeological human remains ever discovered in Lisbon. No excavations will be conducted at this field school.

INTRODUCTION

Archaeological excavation within historic cities often produce deep stratigraphy dating back to the original foundation of the city and telling the story of its history. Following construction works at 74, Rua dos Lagares, the very heart of Old Lisbon, rescue archaeological excavations exposed an area with multiple, well preserved burials dating to the 15th-16th Centuries CE (Late Medieval/Modern period. This area was used as a necropolis in two different time periods. First (necropolis I), it was a Christian (and possibly

Jewish burial site), vandalized in 1497. Later, the area was used as a Muslim and Christian cemetery dated to the 16th century CE.

The upper level (necropolis II) dates to the Late Medieval/Modern Period and is composed of 60 individuals – 11 non-adults of different age groups and 49 adults. These consist of 29 female, 17 male and 4 of undetermined sex. Funerary architecture is characterized by simple oval-shaped graves, with most individual graves varying in orientation from west to southwest. The individuals were typically interred in right lateral and supine positions. These trends reflect customs followed by Islam and Christianity in the same time period.

The lower level (necropolis I), dated to the end of the 15th century and yielded a larger collection, with 259 individuals – 142 non-adults and 117 adults. These consist of 49 female, 57 male and 13 individuals of undetermined sex. Funerary practices indicate that most individuals were deposited in supine position in single pits and graves, with orientations to the West and Northwest. Such patterns may suggest Christian burials, although the presence of specific jewelry type may indicate the presence of members of the Jewish community.

Initial paleopathological study documented a wide variety of lesions and diseases in both necropolises.

The use of the two necropolises was separated in time and it seems the area fell into misuse and abandonment between the two periods. A sterile layer was identified that completely covered the older cemetery, leveling the ground above it. The Lagares site offers a unique opportunity to examine differences in populations that lived in the same location. This includes demographic differences, as well as skeletal evidence for different frequencies of trauma, diseases and markers of labor specialization. Such differences may be the expression of different environmental, cultural, economic or political pressures.

Bioarcheology give us the tools to derive valuable cultural information from human remains. We can estimate age and sex, explore health conditions and may work and other physical activity patterns. It also provides the base for other studies like DNA or stable isotope studies that provide information about mobility and dietary and reconstructions. Combing the anatomical information with the contextual information recovered during excavations allow us to better understand how population's attitudes and customs regarding death, funerary practices and body treatments changed throughout time.

Students will participate in the laboratory research phase of this collection. There will be no excavations. This field school is a classical post-excavation analysis program that strongly emphasize meticulous study of human remains both of their anatomy and their archaeological context. Through field trips around medieval Lisbon, lectures and lab work, students will complete this field school with an overall understanding of how bioarcheology research is a valuable tool in the understanding of past populations from a cultural, political or environmental point of view.

Where is the investigation heading:

- Rescue excavations took place at Lagares between Aug 2015 and Sep 2016 and were conducted by Era Arqueologia. A full archaeological and anthropological report was created and filed with Portuguese authorities. Because of the importance of this site and of large human remains collection, further research is needed so we may better understand the demographical, biological, morphological and paleopathological profile of these populations and the way death was dealt with through different funerary practices at Lisbon.
- Research will focus on documentation of funerary patterns, architectures, modes of deposition and analysis of artefacts accompanied the dead: religious objects, personal ornaments and others.
- This will be the first field school to investigate the human remains recovered from the Lagares site. Results from this season will be combined with research done in future seasons and published in an

edited volume. Students will be encouraged to continue research work on the collection and to take part in the publication efforts.

Work methodologies and concepts students will become familiar with:

- Documentation and research techniques applied to human remains, cleaning and identifying of human bones combining archaeological context with forensic evidence.
- Understanding anatomy of the human skeleton
- Exploring of taphonomic forces (site formation processes) and their impact of the preservation and representation of the archaeological record.
- Understanding and practicing bioanthropological profile assumptions, including Minimum Number of Individuals, age of death, sex identification

Paleopathology:

- General presentation of the large groups:
 - a. Oral Pathology
 - b. Degenerative joint disease (articular and non-articular)
 - c. Traumatic
 - d. Infectious;
 - e. Metabolic
 - f. Endocrine
 - g. Neoplastic
- Complementary Analyzes
- Dating, isotopic and chemical analysis, histology and DNA

ACADEMIC CREDIT UNITS & TRANSCRIPTS

Credit Units: Attending students will be awarded 8 semester credit units (equivalent to 12 quarter credit units) through our academic partner, Connecticut College. Connecticut College is a private, highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see grading assessment and matrix). This field school provides a minimum of 160 direct instructional hours. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institutions prior to attending this field school.

Transcripts: An official copy of transcripts will be mailed to the permanent address listed by students on their online application. One additional transcript may be sent to the student's home institution at no additional cost. Additional transcripts may be ordered at any time through the National Student Clearinghouse: <http://bit.ly/2hvurkl>.

PREREQUISITES

There are no prerequisites for participation in this field school, although prior knowledge of human anatomy will be an advantage. This field school entails hands-on, experiential learning and students will learn on-site how to work in a post excavation laboratory work analyzing human remains. Students must keep in mind that they will be dealing with fragile contexts, materials, and artifacts, and so an adequate and careful approach to every stage of lab work is required.

DISCLAIMER – PLEASE READ CAREFULLY

Our primary concern is with education. Traveling and conducting field research involve risk. Students interested in participating in IFR programs must weigh whether the potential risk is worth the value of education provided. While risk is inherent in everything we do, we do not take risk lightly. The IFR engages in intensive review of each field school location prior to approval. Once a program is accepted, the IFR reviews each program annually to make sure it complies with all our standards and policies, including student safety.

The IFR does not provide trip or travel cancellation insurance. We encourage students to explore such insurance on their own as it may be purchased at affordable prices. insuremytrip.com or Travelguard.com are possible sites where field school participants may explore travel cancellation insurance quotes and policies. If you do purchase such insurance, make sure the policy covers the cost of both airfare and tuition. See this [Wall Street Journal article about travel insurance](#) that may help you decide whether to purchase such insurance.

We do our best to follow schedule and activities as outlined in this syllabus. Yet local permitting agencies, political, environmental, personal, or weather conditions may force changes. This syllabus, therefore, is only a general commitment. Students should allow flexibility and adaptability as research work is frequently subject to change.

You should be aware that conditions in the field are different than those you experience in your home, dorms or college town. July and August are the hot season in Portugal. Temperatures are usually around 35°C/95°F.

You will be dealing with human remains. Respectful approach to the remains and their study is mandatory. A protocol for lab work will be established and followed at all times.

If you have any medical concerns, please consult your doctor. For all other concerns, please consult the project director, as appropriate.

LEARNING OUTCOMES

At the end of this field school, students will acquire tools to perform an anthropological study of human remains and a range of understanding of population demographics, biological, morphological and paleopathological profile.

GRADING MATRIX

Evaluation questionnaire (5%): A questionnaire will be held at the end of Week 1 to assess student comprehension of information provided during that week.

Lab performance (40%): Students will be evaluated as they complete tasks in the lab. Those tasks include cleaning, labelling and full anthropological analysis based on the principles provided through lectures, reading and staff advising.

Lab Notebook (20%): Students are expected to complete a lab journal and present it for evaluation during their final week. Project staff will provide students with expectations for this workbook entries.

Attendance, participation, and demonstration of interest (35%): Students are required to participate in all field school activities and will present research results at the end of each week.

TRAVEL & MEETING POINT

Hold purchasing your airline ticket until six (6) weeks prior to departure date. Natural disasters, political

changes, weather conditions and a range of other factors may require the cancelation of a field school. The IFR typically takes a close look at local conditions 6-7 weeks prior to program beginning and make Go/No Go decisions by then. This time frame still allows the purchase of discounted airline tickets while protecting students from potential loss of airline ticket costs if we decide to cancel a program.

Students are responsible for making their own travel arrangements and get to the program meeting point on June 15, 2020. Students landing in Portela Airport in Lisbon (LIS), will be met by project staff members and transferred to the house where the group will stay in Lisbon. Students arriving by any other means of transportation to Lisbon (train, bus, etc.), should make their way independently to the meeting point at the airport. Specific meeting location and transfer hours will be set after enrolment, to make sure we meet students at the time they arrive to Portugal.

The last working day of this field school is July 10. Students should make departure travel arrangements for any time on the next day, July 11.

If you missed your connection or your flight is delayed, please call, text or email project director immediately. A local emergency cell phone number will be provided to all enrolled students.

VISA REQUIREMENTS

Portugal is a member of the European Schengen Visa Agreement. As such, US citizens may enter Portugal for up to 90 days for tourist or business purposes without a visa. Your passport should be valid for at least 6 months after your designated departure date.

Citizens of other countries should check the Portuguese Embassy website page at their home country for specific visa requirements.

ACCOMMODATIONS

Students will stay at the Campus of the School of Human Kinetics (FMH - Faculdade de Motricidade Humana) of Lisbon University where each room is shared by two students.

MEALS

Lunch will be provided by ERA at the canteen of School of Human Kinetics. Daily breakfast and dinner and weekend meals are the responsibility of each student and are not covered by tuition to this field school. The campus has a shared kitchen.

COURSE SCHEDULE

Week 1: During this first week, students will receive theoretical training as well as the first hands-on engagement with the collection.

June 15, 2020

Morning: Introduction and presentation of project directors and contents of the field school, covering of IFR policies, distribution of Reception Kit and working materials, visit to ERA's installations where the course will take place.

Afternoon: The scientific directors of archaeological excavation at Lagares will present the site. Project director Marina Lourenço will present the general methodology used at the Lagares project.

June 16, 2020

Morning: Biological anthropology and Taphonomy

Afternoon: Practical work with human remains (cleaning and labelling; applying acquired knowledge) June 17, 2020

Morning: Funerary anthropology

Afternoon: Tour in Medieval Lisbon guided by one of ERA's archaeologist.

June 18, 2020

Biological Profile Assessment and practical work.

June 19, 2020

Morphology and paleopathology.

Weeks 2-4: The following weeks will be dedicated to the thorough and complete anthropological study of the necropolis II from the Lagares site.

Complementarily, field trips and conferences with invited specialists will take place every week

June 17, 2020: Visit to Medieval Lisbon guided by Filipe Oliveira.

June 24, 2020: Visit to Hercules Laboratory, Évora. The visit goal is to present students to the varied ways analytical techniques are used for the recovery of molecular data and its application to the understanding mobility and diet.

July 1, 2020: Conference in the morning and in the afternoon visit to CAL (Lisbon Archaeology Centre) where the artifacts recovered at Lagares are stored.

July 8, 2020: Visit to the Department of Life Sciences, University of Coimbra, to observe the Identified Skeletons Collection.

EQUIPMENT LIST

- Medication - It is not necessary to bring over-the-counter medicine since you may buy all common types here (e.g. aspirin, anti-insecticides, sunscreen, etc.). It is recommended, however, that you bring any prescription medicines;
- A converter for an EU type electricity wall-plug if needed;
- Clothing for laboratory work

REQUIRED READINGS

Buikstra, J.; Ubelaker, D. 1994. "Standards for data collection from Human Skeletal Remains". *Arkansas Archeological Survey Research Series* Number 44. Fayetteville: Arkansas Archeological Survey. Chapter 1 (Pages 1-12).

White, T. 2000. *Human Osteology*. 2nd edition. San Diego: Academic Press. Chapters 1 and 2

Lambert, P.M. and Walker, P.L. 2019. Bioarchaeology Ethics. In *Biological Anthropology of the Human Skeleton*. Katzenberg M.A. and A.L. Grauer, editors). Hoboken: John Wiley & Sons, Inc. Pages 1-46.

Stodder, A.L. 2019. Taphonomy and the Nature of Archaeological Assemblages. In *Biological Anthropology of the Human Skeleton*. Katzenberg M.A. and A.L. Grauer, editors. Hoboken: John Wiley & Sons, Inc. Pages 71-114.

O'Donnabhain B., Lozada M.C. 2018. Contested Bones: Archaeological Human Remains and Legacies of Power. In *Archaeological Human Remains: Global Perspectives*. O'Donnabhain B. and M. Lozada, editors. Cham: Springer. Pages 1-6

Santos A.L. 2018. Skulls and Skeletons from Documented, Overseas and Archaeological Excavations: Portuguese Trajectories. In *Archaeological Human Remains: Global Perspectives*. O'Donnabhain B. and M.

Lozada, editors. Cham: Springer. Pages 111-125

Eriksson, Gunilla. 2013. Stable Isotope Analysis of Humans. In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and Nilsson Stutz, editors. Oxford: Oxford University Press. Pages 123-146.

Petersen, Andrew. 2013. The Archaeology of Death and Burial in the Islamic World. In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and Nilsson Stutz, editors. Oxford: Oxford University Press. Pages 241-258.

O'Sullivan, Deirdre. 2013. Burial of the Christian Dead in the Later Middle Ages. In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and Nilsson Stutz, editors. Oxford: Oxford University Press. Pages 259-280.

Sofaer, Joanna and Marie Louise Stig Sørensen. 2013. Death and Gender. In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and Nilsson Stutz, editors. Oxford: Oxford University Press. Pages 527-542.

Richard Zimler. 1998. *The Last Kabbalist of Lisbon*. New York: The Overlook Press.