



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

*Course ID: ARCH 365BF*

*June 30th - July 27th, 2024*

**Academic Credits: 8 Semester Credit Units**

### FIELD SCHOOL DIRECTORS

Dr. Lucy Shaw Evangelista, ERA Arqueologia, SA Portugal ([lucyevangelista@era-arqueologia.pt](mailto:lucyevangelista@era-arqueologia.pt))

Dr. Marina Lourenço, ERA Arqueologia, SA Portugal ([marinalourenco@era-arqueologia.pt](mailto:marinalourenco@era-arqueologia.pt))



### OVERVIEW

Archaeological excavation within historic cities often reveals deep stratigraphy dating back to the original foundation of the city and tells the story of its history. Following construction works at 74 Rua dos Lagares, in 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: Necropolis I was a Christian and possibly Jewish burial site and was later vandalized in 1497; Necropolis II was a Muslim and Christian cemetery used in 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 females, 17 males, 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.

Because of the importance of this site and of large human remains collection, further research was needed so a better understanding of the demographic, biological, morphological and paleopathological profile of these populations and the way death was dealt with through different funerary practices at Lisbon could be achieved. The 2023 IFR field school edition was the first to return to this collection and further investigate the human remains recovered from the Lagares site.

The research focused on documentation of funerary patterns, architectures, modes of deposition and the analysis of artifacts accompanying the dead: religious objects, personal ornaments and others. Twenty skeletons from Necropolis II were analyzed during the 4 weeks of work. They included non-adults and adults of both sexes. Many had pathologies and several presented cultural modifications of anterior dentition. This first experience underlined the importance of this laboratory work which will be continued in 2024.

#### 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 highly ranked liberal arts institution with a deep commitment to undergraduate education. Students will receive a letter grade for attending this field school (see assessment, below). This field school provides a minimum of 260 hours of experiential education. Students are encouraged to discuss the transferability of credit units with faculty and registrars at their home institution 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 more transcript may be sent to the student's home institution at no cost. Additional transcripts may be ordered at any time through the [National Student Clearinghouse](#).

#### PREREQUISITES

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

#### COURSE OBJECTIVES

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. For this reason, an IFR field School took place in the summer of 2023. The research focused on documentation of funerary patterns, architectures, modes of deposition and the analysis of artifacts accompanying the dead: religious objects, personal ornaments and others.

The 2024 field will be the second edition and a further opportunity to investigate the human remains recovered from the Lagares site.

Results from this season will be combined with research done in past and 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.

## LEARNING OUTCOMES

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

### Methods 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 taphonomic forces (site formation processes) and their impact on the preservation and representation of the archaeological record.

- Understanding and practicing bioanthropological profile assessments, including Minimum Number of Individuals, age of death, sex identification

### Paleopathology:

- General characteristics of the large groups:

  - Oral Pathology

  - Degenerative joint disease (articular and non-articular)

  - Traumatic

  - Infectious

  - Metabolic

  - Endocrine

  - Neoplastic

- Complementary Analyzes

- Dating, isotopic and chemical analysis, histology and DNA

## ASSESSMENT

**Evaluation questionnaire (5%):** A questionnaire will be held at the end of Week 2 to assess student comprehension of the information provided during lectures, field trips and lab work.

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

## **COURSE SCHEDULE**

All IFR field schools begin with an orientation that addresses local and program protocols concerning student behavior, appropriate attire, local practices and sensibilities that may be unfamiliar, potential fauna and flora hazards, IFR harassment and discrimination policies, and the student Code of Conduct. Work days will start at 9 am and finish around 6 pm. There will be a morning and afternoon 15-minute break and a one-hour lunch break.

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

### July 1, 2024

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 the archaeological excavation at Lagares will present the site. Project director Marina Lourenço will present the general anthropological methodology used at the Lagares project.

### July 2, 2024

Morning: Biological anthropology and Taphonomy

Afternoon: Practical work with human remains (cleaning and labeling; applying acquired knowledge).

### July 3, 2024

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

### July 4, 2024

Morning: Funerary anthropology; Biological Profile Assessment

Afternoon: Practical work with human remains (cleaning and labeling; applying acquired knowledge)

### July 6, 2023

Morning: 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.

Field trips and conferences with invited specialists will take place every week.

July 3, 2024: Visit to Medieval Lisbon guided by Filipe Oliveira.

July 10, 2024: Visit to Hercules Laboratory, Évora. The visit's goal is to present students with the varied ways analytical techniques are used for the recovery of molecular data and its application to the understanding of population movement and diet.

July 17, 2024: Visit to CAL (Lisbon Archaeology Centre) where the artifacts recovered at Lagares are stored.

July 24, 2024: Visit to the Department of Life Sciences, University of Coimbra, to observe the Identified Skeletons Collection.

## REQUIRED READINGS

PDF files of all mandatory readings will be provided to enrolled students. Students are encouraged to download and/or print readings prior to traveling. Course participants are expected to be prepared to engage the discussions led by facilitators, all of whom will be looking for compelling evidence that students have read and thought about the assigned readings prior to the scheduled day on which they are first discussed.

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

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

## RECOMMENDED READINGS

ambert, 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., Lozada M. 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., Lozada M. editors). Cham: Springer. Pages 111-125.

Erickson, G. 2013. "Stable Isotope Analysis of Humans." In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and N. Stutz, editor. Oxford: Oxford University Press. Pages 123-146.

Petersen, A. 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 N. Stutz, editor. Oxford: Oxford University Press. Pages 241-258.

O'Sullivan, D. 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 N. Stutz, editor. Oxford: Oxford University Press. Pages 259-280.

Sofaer, Joanna and Stig Sørensen. M. L.. 2013. "Death and Gender." In *The Oxford Handbook of the Archaeology of Death and Burial*. Tarlow, S and N. Stutz, editor. Oxford: Oxford University Press. Pages 527-542.

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

## PART II: TRAVEL, SAFETY & LOGISTICS

### NOTICE OF INHERENT RISK

Traveling and conducting field research can involve risk. The IFR engages in intensive review of each field school location and programming prior to approval. Once a program is accepted, the IFR reviews each program annually to make sure it still complies with all our standards and policies, including those pertaining to student safety. Participants should also take every reasonable step to reduce risk while on IFR programs, including following the safety advice and guidelines of your program director, being alert to your surroundings and conditions, letting someone know where you will be at all times, and assessing your personal security.

The IFR does not provide trip or travel cancellation insurance. We strongly encourage participants to consider purchasing this insurance, as unexpected events may prevent your participation or cause the program to be canceled. Insurance is a relatively small cost to protect your educational investment in an IFR program. When comparing trip cancellation insurance policies, make sure the policy covers the cost of both airfare and tuition.

Please note that the schedule outlined in this syllabus can be disrupted by any number of unforeseen circumstances, including revised decisions by local permitting agencies, political unrest, and changes in the weather. While this schedule represents the best of the director(s) intentions, we—students and staff alike—need to be adaptable and tolerant of necessary alterations. This adaptability is an intrinsic part of all field research.

If you have any medical concerns, please consult with your doctor. For all other concerns, please consult with the program director and staff.

### VISA REQUIREMENTS

**NO VISA IS NECESSARY** if you are a U.S. citizen and will be traveling to Portugal for up to 90 days. However, you will need a valid U.S. passport for at least 3 months from the date of planned return or other travel document recognized by member States of the Schengen Agreement.

However, foreign citizens need to ensure the following conditions:

- You must have sufficient means of subsistence for the period of stay.
- You must not be registered in the SEF Integrated Information System or in the Schengen Information System

All information is available on <https://imigrante.sef.pt/en/entrada-em-portugal/> and <https://washingtondc.embaixadaportugal.mne.gov.pt/en/consular-services/visa-information>

### STUDENT HEALTH

An IFR field school is designed to provide safe, positive, and constructive experiences for participating communities, students, and researchers. We are committed to protocols and practices that support the health and well-being of all involved in our field school projects, including the members of the community in which these projects take place.

We recommend that students adopt best-practices for arriving in a good state of health to protect themselves and their peers' readiness to set about the work of the field school. A thriving field camp environment is a constant exchange of energy, patience, effort, respect, and service. Arriving healthy is

every student's first act of service — their first opportunity to behave in a way that respects the safety and wellness of one another.

## **TRAVEL (TO AND DURING THE PROGRAM)**

Natural disasters, political changes, weather conditions and various other factors may force the cancellation or alteration of a field school. IFR recommends students only purchase airline tickets that are fully refundable and consider travel insurance in case a program or travel plans must change for any reason. General information for this program is below, but keep in mind we will discuss any updated travel information and regulations during the required program orientation, which could affect travel plans.

Students are responsible for making their own travel arrangements and getting to the program meeting point on June 30 2024. 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. The specific meeting location and transfer hours will be set after enrolment.

The last working day of this field school is July 26, 2024. Students should make departure travel arrangements for any time on or after the next day, July 27, 2024.

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

## **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. Each floor is equipped with Wi-Fi, a shared kitchen, and shared bathrooms. The rooms are regularly cleaned (once a week) and laundry equipment is also available. Clean linen is available at all times.

In terms of sleeping arrangements students will be lodged in double rooms with two separate beds, wardrobes and desks.

### **Meals**

Students will be provided with regular trips to the local supermarket where they can acquire their own food according to each students' tastes and needs. In this way students can prepare their own meals (daily breakfast, lunch and dinner and weekend meals) at the shared facilities in the campus. Alternatively, in the canteen of the School of Human Kinetics, a fish dish, a meat dish, and a vegetarian option are available for every lunch, and meals can be prebooked by students.

Please note that although the number of students in the halls of residence at this time of the year is small, there may be other students staying at the residence who will be sharing the common facilities. IFR students must attend to their belongings and are encouraged not to leave belongings in shared spaces.