



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP44\_DIP\_DBIOS

## Visiting Professor Program Academic year 2020/2021

DEPARTMENT OF LIFE SCIENCES AND SYSTEMS BIOLOGY

TEACHING COMMITMENT: 24 hours

COURSE TITLE

**Reconstructing Ancient Diets**

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Methodologies of Archaeological Research

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

Dietary reconstructions are key to understanding past patterns of subsistence, which inform about past environments, population dynamics and the socio-cultural characteristics of different communities. Food preparation and consumption are basic elements in human life that have left traces in the archaeological record. By studying these remains we can gain considerable knowledge about dietary practises in antiquity. Studying ancient faunal and botanical remains using methods typical of the Natural Sciences is fundamental in reconstructing past diets, and in identifying available food products. Over the last few decades, novel techniques have shown a remarkable adeptness at acquiring data from a variety of archaeological artefacts (e.g. ceramics, lithics, textiles, sediments, plant remains, human and animal tissues).

This course is intended to explore the potential of diet and consumption as a source of information about life in prehistory, by surveying new and traditional research methods from the fields of archaeology and natural sciences and their application to different case studies from Prehistory. We will focus on three topics, namely lipid biomarker analysis, plant microfossils and bulk stable isotope analysis. The scientific principles will be discussed during the lectures, together with examples taken

from previous and current research to illustrate how each of the three techniques has been utilised and the archaeological questions that can be answered.

### **LEARNING OBJECTIVES**

The main aim is to familiarise students with the different methodologies applied to the study of ancient diet, and also to impress upon them the importance of multidisciplinary and integrative approaches when carrying out research in this field of study.

By the end of the course, students will:

- Have a general knowledge of the different methodologies applied to the study of ancient diets, with a special focus on lipid biomarker analysis, bulk stable isotope analysis and plant microfossils analysis.
- Have an understanding of the preservation of organic remains over archaeological timescales and the implications for research.
- Be able to recognise the strengths and limitations of the different scientific methodologies, as well as their complementary nature when planning research projects.
- Be aware of how to handle and store samples pending analysis, and strategies in sample selection.
- Be able to formulate appropriate research questions and plan a simple palaeodietary study.

### **TUTORSHIP ACTIVITIES (IF APPLICABLE)**

The Visiting Professor will be available for co-tutoring student dissertations. In particular, the VP and Demarchi will devise dissertation topics involving the joint analysis of artefacts and human remains currently studied by colleagues at the Museo di Antropologia ed Etnografia (MAET), including material from the Egyptian "Marro" collection. This will involve other DBIOS and MAET personnel, as well as colleagues from the Departments of Historical Studies and the Humanities Studies (STUDIUM).

### **LAB ACTIVITIES (IF APPLICABLE)**

The students will use the information gathered during the course, including some practical experience in the laboratory, e.g. for sample preparation and data analysis, and put together a simple research project proposal, which could form the basis for e.g. a funding proposal. This will allow them to acquire key skills in project planning, which will be useful for their future careers within and beyond academia.

### **OTHER ACTIVITIES (IF APPLICABLE)**

- Seminars for the module "I beni culturali nel XXI secolo", scuola di Studi Superiori "Ferdinando Rossi"
- Seminars for the newly-established "Scuola di Specializzazione di Archeologia"
- Conferences on ancient diets open to all staff and students from DBIOS as well as other Departments (Studi Storici, Studi Umanistici)
- Collaborative writing of funding proposals (Marie Curie Fellowship, ERC Starting Grant)

**VISITING PROFESSOR PROFILE DESCRIPTION**

An expert in Archaeometry and Archaeological Science, with several years' experience of teaching at University level (undergraduate and postgraduate), high-profile publications in the field of palaeodietary reconstructions (organic residues analysis, stable isotopes geochemistry), especially with regard to the Prehistory of the Mediterranean area.

**CONTACT PERSON AT THE DEPARTMENT**

Prof. Beatrice Demarchi

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