UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP43_DIP_BIOS

Visiting Professor Program
Academic year 2019/2020

DEPARTMENT OF LIFE SCIENCES AND SYSTEMS BIOLOGY

TEACHING COMMITMENT: 42 hours

COURSE TITLE

The origin and evolution of music

TEACHING PERIOD

2nd term

SCIENTIFIC AREA

Zoology

LANGUAGE USED TO TEACH

english

COURSE SUMMARY

Why do humans have music? From a biological, evolutionary perspective, music is a bit of a mystery. Music making, listening, and enjoyment are extremely common in our species. However, compared to other behaviors or neurobiological predispositions, such as speaking or seeing colors, music does not seem to provide an obvious evolutionary advantage. After centuries of pure theoretical speculation, we have reached an empirical turn: hypothesis on why humans have music are being precisely formulated and empirically tested. The aim of this course is to introduce students to the highly interdisciplinary field of music origin and evolution. The course should develop over 3 months, and consist of 12 lectures of 3.5 hours each. Students will learn about empirical approaches to music evolution spanning the following disciplines: animal behavior, bioacoustics, genetics, neurobiology, cognitive neuroscience, comparative psychology, developmental psychology, music perception, human movement sciences, agent based modeling, linguistics, and speech sciences. The content of the course should partly overlap with 'Honing, H. (2017) The Origins of Musicality. MIT Press Cambridge, MA' but also include practical, hands-on sessions.

LEARNING OBJECTIVES

By the end of this course, students will:
- be able to apply evolutionary thinking to a complex neuro-behavioral trait, such as music;
- have an up to date knowledge of all recent empirical literature on the topic of music evolution;
- be able to design a 'mock experiment' to empirically test hypotheses on the evolution of music.

TUTORSHIP ACTIVITIES

1. The Visiting Professor shall be available to students who wish to consult him on his/her field of expertise, an shall supervise students who will prepare a paper under his/her guidance.

2. Themes and titles will be decided during the course and approved by the teacher, who will be available to meet with students who desire bibliography or other counseling.

LAB ACTIVITIES

The course will include hands-on sessions, requiring a laptop/desktop computer for each student with Praat and Python installed. Activities will include: agent based modeling of music-like behaviors in non-human animals (e.g. chorusing) and empirically testing hypotheses on actual bioacoustics data.

OTHER ACTIVITIES BESIDES THE COURSE

1 conference open to the general public

3 seminars for PhD students

VISITING PROFESSOR PROFILE

The candidate has a degree in (Cognitive) Biology, with academic experience (shown by publication record and student supervision) in biology, musicology, neuroscience, psychology and linguistics. A strong interdisciplinary profile will be highly appreciated, as well as a practical experience with computational modeling and empirical research in humans and other animals.

CONTACT PERSON AT THE DEPARTMENT

Cristina Giacoma
cristina.giacoma@unito.it