



«ETTORE MAJORANA» FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE
TO PAY A PERMANENT TRIBUTE TO ARCHIMEDES AND GALILEO GALILEI, FOUNDERS OF MODERN SCIENCE
AND TO ENRICO FERMI, THE "ITALIAN NAVIGATOR", FATHER OF THE WEAK FORCES



INTERNATIONAL SCHOOL OF ETHOLOGY

«DANILO MAINARDI»

48th Course: **DARWIN IN MEDICINE: WHY EVOLUTION IS RELEVANT FOR RESEARCH AND MEDICAL PRACTICE**

ERICE-SICILY: 19 – 23 APRIL 2022

Sponsored by the: Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government

PROGRAMME AND LECTURERS

Darwin in Medicine: Medicine in Darwin

- D.R. WILSON, Western University, Pomona, CA, US

Evolutionary Medicine: Contributions to present and future global challenges

- F. RÜHLI, University of Zurich, CH

Darwin's impact on medical sciences

- F. ZAMPIERI, University of Padova, IT

The influence of human evolution on health and disease

- P. PALANZA, University of Parma, IT
- S. PARMIGIANI, University of Parma, IT

Modelling the evolution of the mother-infant dyad in ancient human populations

- A. NAVA, University of Kent, Canterbury, Kent, UK

A Darwinian reformulation of the "Hygiene Hypothesis"

- G. ROOK, University College London, UK

Aging, somatic evolution and cancer – the inexorable link

- J. DE GREGORI, University of Colorado, USA

The evolution of human childbirth and obstructed labor

- P. MITTEROECKER, University of Wien, AT

Evolutionary and Life History perspectives on health and aging in men

- R. BRIBIESCAS, Yale University, New Haven, CT, US

The kidney between adaptation and injury across evolution

- P. ROMAGNANI, University of Florence, Firenze, IT

Sexual selection and Sex differences in disease vulnerability

- C. BLANCHARD, University of Hawaii at Manoa, Honolulu, HI, US

Theory of Medical Psychology and Psychotherapy

- G. MEDICUS, University of Innsbruck, Innsbruck, AT

Evolutionary Psychiatry and the search for brain lesions: Why the Holy Grail is just wishful thinking

- A. TROISI, University of Rome Tor Vergata, Roma, IT

Maladaptive consequences of early childhood adversity

- M. BRUNE, Ruhr University, Bochum, DE

PURPOSE OF THE COURSE

The purpose of this interdisciplinary course is to understand why and how the evolutionary perspective is relevant for medicine, both in terms of research and practice (i.e. why we need "Evolutionary Medicine"). • Human evolution has been slow and anatomical and physiological characteristics of our species (i.e. our bauplan) have changed very little in the last 80,000 years or so, however changing ecological contingencies have turned into risk factors for somatic disease and psychological disorders. • Thus, for example, adaptations to the past environments including nutritional requirements, exposure to pathogens, social issues etc. have now turned into "epidemics" of autoimmune diseases, cardiovascular disease, diabetes and obesity, several forms of cancer, depression, anxiety and other psychiatric conditions. • The workshop will highlight that understanding of evolutionary processes in medicine is not just an academic exercise, but imperative to better understand, diagnose, prevent, and treat medical conditions.

APPLICATIONS

Persons wishing to attend the Course should send an application, by electronic mail, to:

Professor Paola Palanza email: paola.palanza@unipr.it
and or

Professor Stefano Parmigiani email: stefano.parmigiani@unipr.it
Specifying: i) Date and place of birth together with present nationality ii) Present position and place of work iii) An abstract, if they wish to give a contribution (oral or poster)

PLEASE NOTE

Participants must arrive in Erice on April 19, no later than 7 p.m.

POETIC TOUCH

According to legend, Erice, son of Venus and Neptune, founded a small town on top of a mountain (750 metres above sea level) more than three thousand years ago. The founder of modern history — i.e. the recording of events in a methodic and chronological sequence as they really happened without reference to mythical causes — the great Thucydides (~500 B.C.), writing about events connected with the conquest of Troy (1183 B.C.) said: «After the fall of Troy some Trojans on their escape from the Achaei arrived in Sicily by boat and as they settled near the border with the Sicilians all together they were named Elymi: their towns were Segesta and Erice.» This inspired Virgil to describe the arrival of the Trojan royal family in Erice and the burial of Anchise, by his son Enea, on the coast below Erice. Homer (~1000 B.C.), Theocritus (~300 B.C.), Polybius (~200 B.C.), Virgil (~50 B.C.), Horace (~20 B.C.), and others have celebrated this magnificent spot in Sicily in their poems. During seven centuries (XIII-XIX) the town of Erice was under the leadership of a local oligarchy, whose wisdom assured a long period of cultural development and economic prosperity which in turn gave rise to the many churches, monasteries and private palaces which you see today. In Erice you can admire the Castle of Venus, the Cyclopean Walls (~800 B.C.) and the Gothic Cathedral (~1300 A.D.). Erice is at present a mixture of ancient and medieval architecture. Other masterpieces of ancient civilization are to be found in the neighbourhood: at Motya (Phoenician), Segesta (Elymian), and Selinunte (Greek). On the Aegadian Islands — theatre of the decisive naval battle of the first Punic War (264-241 B.C.) — suggestive neolithic and paleolithic vestiges are still visible: the grottoes of Favignana, the carvings and murals of Levanzo.

Splendid beaches are to be found at San Vito Lo Capo, Scopello, and Cornino, and a wild and rocky coast around Monte Cofano: all at less than one hour's drive from Erice.

More information about the other activities of the
«ETTORE MAJORANA» FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE
can be found on the WWW at the following address:
<http://www.ccsem.infn.it>