



«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»

## 49th Course: *MENS SANA IN CORPORE SANO:* *PSYCHOBIOLOGICAL EFFECTS OF PHYSICAL ACTIVITY*

ERICE-SICILY: 1 – 4 MAY 2022

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

### PROGRAMME AND LECTURERS

*Exercise in the evolution of human neurobiology*

• D. CAPOROSI, University of Roma, IT

*Physical exercise and visual cortex plasticity active training for amblyopia recovery*

• A. SALE, C.N.R. Institute of Neuroscience, Pisa, IT

*Healthy body healthy mind? Joining physical exercise and mental health in a neurobiological perspective*

• F. CIRULLI, Istituto Superiore di Sanità, Roma, IT

*Affective responses during exercise a way to a healthier and active lifestyle?*

• M. VANDONI, University of Pavia, IT

*Effects of motor experience on anticipatory brain functions*

• V. BIANCO, IRCCS Fondazione Santa Lucia, Roma, IT

*Epidemiology, physical fitness early in life and its effect on brain diseases later in life*

• G. KUHN, University of Gothenburg, SE

*Somatic consequences of chronic psychological stress the case of borderline personality disorder*

• M. BRÜNE, LWL University Hospital, Bochum, DE

*The role of posture in rehabilitation*

• A. FRIZZIERO, University-Hospital of Padova, IT

*Functional overload of the muscle tendon*

• C. COSTANTINO, University of Parma, IT

*The Truth of numbers. The Journey around a world of numbers a football experience*

• D. GUALTIERI, University of Milan, IT

*Physical activity and aging*

• M. MAGGIO, Università di Parma, IT

*Metabolomics and Microbiomics towards Sportomics*

• V. FANOS, University of Cagliari, IT

*The multiple beneficial actions of exercise in the brain involve hormones with multiple actions in the brain*

• I. TORRES ALEMAN, Cajal Institute, Madrid, ES

*Psychobiology of sports competition an evolutionary approach*

• D. PONZI and S. PARMIGIANI, University of Parma, IT

*Emotions, Immunity and Sport insights into psychobiological profile*

• M. PESCE, Università degli Studi G. d'Annunzio Chieti e Pescara, IT

### PURPOSE OF THE COURSE

The purpose of this interdisciplinary Course is to bridge the gap between the various fields that are concerned with the question of physical activity and its implications for health and disease.

Experts of different fields ranging from sport science, sport medicine, and sport psychology will address and discuss the following topics: nutrition training, biomechanics, physiology, kinesiology, injury prevention rehabilitation, motivation, personality traits, and mental health. This topics will be integrated with the perspective of ethology (behavioral biology), evolutionary psychobiology and psychoneuroimmunology. Sex differences with respect to physiology, psychology and sport performance will be also explored.

The Course is addressed to students and researchers in sport sciences (i.e. sport medicine and sport psychology), including PhD and undergraduate students of medical schools, psychology, sport sciences, neurobiology, etc as well as professional sports coaches and anyone interested in this interdisciplinary approach.

### APPLICATIONS

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

Professor Stefano Parmigiani email: [stefano.parmigiani@unipr.it](mailto:stefano.parmigiani@unipr.it)

and or

Professor Paola Palanza email: [paola.palanza@unipr.it](mailto:paola.palanza@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 no later than 12 a.m. on 1st May 2022.

### 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 Anchises, by his son Aeneas, 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 «Ettore Majorana» Foundation and Centre for Scientific Culture can be found on the WWW at the following address:

<http://www.csem.infn.it>