



ETTORE MAJORANA FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE
1963–2023
60th ANNIVERSARY OF ACTIVITIES



INTERNATIONAL SCHOOL OF BIOLOGICAL MAGNETIC RESONANCE

19th Course: *FRONTIERS IN BIOPHYSICS*

ERICE-SICILY: 10 – 17 JULY 2023

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

PROGRAMME AND LECTURERS

Nucleic Acid structure and function

Protein NMR and HIV

Single Cell genomics

Microscopy and cellular transport

Protein structure and membrane targeting

CRISPR technologies

CryoEM and tomography

Proteomics and cellular composition

Machine learning

Biophysics from molecules to cells to organisms

Computational design of proteins

Improving human health through biophysics

- K. BOAHEN, Stanford University, Stanford, CA, US
- B. CLEMONS, California Institute of Technology, Pasadena, CA, US
- E. DE LA CRUZ, Yale University, New Haven, CT, US
- S. DELP, Stanford University, Stanford, CA, US
- J. ELF, Uppsala University, SE
- A. GRONENBORN, University of Pittsburgh, Pittsburgh, PA, US
- T. KIRCHHAUSEN, Harvard Medical School/PCMM, Boston, MA, US
- T. KORTTEMME, UCSF, San Francisco, CA, US
- E. LUNDBERG, Stanford University, Stanford, CA, US
- O. NUREKI, The University of Tokyo, Tokyo, JP
- J. PUGLISI, Stanford University School of Medicine, Stanford, CA, US
- S. QUAKE, Stanford University, Stanford, CA, US
- E. VIANI, Stanford University School of Medicine, Stanford, CA, US

PURPOSE OF THE COURSE

This course focuses on recent advances in biophysics, bioengineering and structural biology, as applied to key problems in modern biomedical research.

The format of the course encourages extensive discussion and life-long collaboration and friendship. Students and postdoctoral researchers from a wide range of backgrounds are encouraged to apply.

APPLICATIONS

Persons wishing to attend the Course should apply writing to:

Professor Joseph D. PUGLISI
Stanford University School of Medicine
Stanford, CA, USA
E-mail: puglisi@stanford.edu

Specifying:

- Date and place of birth together with present nationality
- Present position and place of work
- 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 10th July 2023.

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 Sicanians 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.

More information about the activities of the Ettore Majorana Foundation
can be found on the WWW at the following address:
<https://ettoremajoranafoundation.it>