



INTERNATIONAL SCHOOL OF BIOELECTROMAGNETICS "ALESSANDRO CHIABRERA"

2nd Course: ELECTROMAGNETIC FIELDS AND GENOTOXICITY

ERICE-SICILY: 3 - 9 OCTOBER 2005

- Sponsored by the: • Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government
• European Bioelectromagnetics Association (EBEA) • World Health Organization (WHO) • EMF-NET (EC FP6 Coordination action)
• European Cooperation in the Field of Scientific and Technical Research (COST 281)
• Verum Foundation for Behaviour and Environment (Munich) • ENEL S.P.A.
• Centro Interuniversitario per lo Studio delle Interazioni tra Campi Elettromagnetici e Biosistemi (ICEmB)

TOPICS AND LECTURERS

Introduction to the course

- F. BERSANI, University of Bologna, I
- VIJAYALAXMI, University of Texas, San Antonio, TX, USA
- M.R. SCARFÌ, CNR, Naples, I

Comet Assay

- R. TICE, NIEHS, USA

Chromosomal Aberrations

- D. LLOYD, Health Protection Agency, UK

Sister chromatid Exchanges

- G. OBE, University of Duisburg-Essen, D

Micronuclei

- H. NORPPA, Finnish Ins. Occup. Health, Helsinki, FIN

Seminar: Molecular Techniques in Cytogenetics

- G. OBE, University of Duisburg-Essen, D

In vitro/in vivo ELF exposure systems

- M. LIBERTI, University of Roma, I

Overview of ELF studies

- VIJAYALAXMI, University of Texas, San Antonio, TX, USA

Results on genotoxic effects of ELF in vitro

- L. VERSCHAEVE, VITO, Mol, B

Results on genotoxic effects of ELF in vitro

- M. SIMKO, University of Rostock, D

Results on genotoxic effects of ELF in vivo

- J. JUUTILAINEN, University of Kuopio, FIN

Results on genotoxic effects of ELF in vivo

- McNAMEE, Health Canada, CDN

Combined Effects of ELF and mutagens

- VIJAYALAXMI, University of Texas, San Antonio, TX, USA

Seminar: apoptosis

- M. SIMKO, University of Rostock, D

In vitro/in vivo RF exposure systems

- J. FROEHLICH, ETH, Zurich, CH

Overview of RFR studies

- VIJAYALAXMI, University of Texas, San Antonio, TX, USA

- M.R. SCARFÌ, CNR, Naples, I

Results on genotoxic effects of RF in vitro

- R. BARALE, University of Pisa, I

Origin and importance of chromosomal aberrations in the field of RF research

- G. OBE, University of Duisburg-Essen, D

Results on genotoxic effects of RF in vitro

- McNAMEE, Health Canada, CDN

Results on genotoxic effects of RF in vivo

- L. VERSCHAEVE, VITO, Mol, B

Results on genotoxic effects of RF in vivo

- VIJAYALAXMI, University of Texas, San Antonio, TX, USA

Combined Effects of RF and mutagens

- M.R. SCARFÌ, CNR, Napoli, I

Seminar: Genomics and proteomics

- C. MAERCKER, Heidelberg, D

Satellite Symposium – Recent investigations and confirmation studies on genotoxicity

ELF Studies

- H. RUEDIGER, University of Wien, A

- M.R. SCARFÌ, CNR, Napoli, I

RF Studies

- R. TAUBER, University of Hamburg, D

- R. TICE, NIEHS, USA

- M.R. SCARFÌ, CNR, Napoli, I

- B.D. GÖRLITZ, ITEM, D

- L. STRONATI, ENEA, Roma, I

- D. LLOYD, Health Protection Agency, UK

- L. VERSCHAEVE, VITO, Mol, B

Overall Assessment of Replication Studies

- VIJAYALAXMI, University of Texas, San Antonio, TX, USA

- M.R. SCARFÌ, CNR, Naples, I

Seminar: the problem of replication in Science

- F. BERSANI, University of Bologna, I

Seminar: Guidelines to perform in vitro micronucleus assay

- H. NORPPA, Finnish Ins. Occup. Health, Helsinki, FIN

Experiments scheduling, appropriate controls and power analyses

- F. MERLO, IST, Genova, I

Statistical methods in MN experiments

- S. BONASSI, IST, Genova, I

Seminar: Transposons

- B. DEL RE,

- G. GIORGI, University of Bologna, I

PURPOSE OF THE COURSE

The second Course of the School will cover different aspects of genotoxicity in relation to electromagnetic field exposure, including a discussion on recent results on *in vivo* and *in vitro* studies. All areas of interest will be covered in lectures, seminars, discussions where senior scientists will share with participants their own experience, and in a final round table organised by the European Coordination Action EMF-NET.

APPLICATIONS

Interested candidates should write to the Directors of the Course:

Maria Rosaria SCARFÌ
CNR – Institute for Electromagnetic Sensing of Environment
Via Diocleziano, 328 -80124, NAPLES, Italy
Tel: +39.081.5707999 - Fax: +39.081.5705734

VIJAYALAXMI
Dept. of Radiation Oncology
University of Texas
Health Science Center, San Antonio, Texas
Tel: +1.210.6927874 - Fax: +1.210.9495085

specifying:

- A short Curriculum Vitae
- Scientific interest of the candidate
- For young Researchers: letter of recommendation of a Senior Scientist by e-mail (attached Word or PDF file)

PLEASE NOTE

Participants must arrive on October 2, not later than 7 pm.

PORPOSE OF THE COURSE

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 «Ettore Majorana» Foundation and Centre for Scientific Culture can be found on the WWW at the following address:
<http://www.csem.infn.it>