## ALFREDO COLOSIMO: Short CV

Alfredo Colosimo (AC) was born in Naples in 1947. In 1973, at the University of Rome "La Sapienza", he defended a thesis in Chemistry on the cooperative interaction among subunits in human hemoglobin, prepared under the supervision of prof. Eraldo Antonini and prof. Jeffries Wyman Jr.

In 1974 AC served in the Army as a lieutenant; in 1975 spent a semester at the Univ. of Mogadiscio (Somaly) in charge of organizing a Biochemistry course in the local School of Medicine; from 1976 to 1982 was assistant professor of Molecular Biology and Biophysics at the University of Camerino. In 1983 AC became associate professor of Molecular Biology at the University of Rome "Tor Vergata" and, in 1986, professor of Medical Chemistry in the University of Chieti.

In 1989 AC became full professor of Biophysics in the Medical Faculty of the Univ. "La Sapienza".

Thus, since 1990 AC was teaching Human Physiology in the Faculty of Medicine (CL "C"), in the C.d.L. "Tecniche della prevenzione nell'ambiente e nei luoghi di lavoro" (Rieti), in the "C.d.L. "Dietistica" and in several "Scuole di Specializzazione", as well as in the School of Medical Physics (Dept. of Physics), of "La Sapienza".

In 2011 AC became a member of the Dept. of Sc. Anatomiche, Istologiche Medico-Legali e dell'Apparato Locomotore, is the coordinator of the PhD course in Biophysics and director of the Interdisciplinary Research Center for the Study of Biomedical Systems (CISB – Palazzo Baleani) of 'La Sapienza' University.

## Recent Scientific Interests

The scientific interests of A. Colosimo lately focussed on the dynamics of complex phenomena of biomedical significance studied by linear and nonlinear statistical techniques, like multivariate analysis, recurrence quantification analysis, etc. The general aim is to dissect out the individual variability from the invariant features within the elements of homogeneous populations. Results of specific interest have been obtained in the following areas:

- a) Inference of functional dis/similarities in biopolymers from the pattern distribution of physico-chemical properties along their sequences.
- b) Fine dynamical structure of biosignals like Electro Encephalograms or Otoacustic Emissions
- c) Influence of genetic and/or environmental factors in shaping the adaptation to temperature in different fish species.

## International collaborations

The main international collaborations of AC include at present the following institutions:

- Department of Physiology Loyola University Chicago (Prof. Charles L. Webber, Jr.);
- CMR Instrumentation and Department of Biology, University of Bergen, Norway (Prof. O. Brix)
- Nofima, P.O. Box 5010, Aas, Norway (Dr. Ø. Andersen)
- Australian Sun and Health Research Laboratory, Brisbane. (Prof. M.G. Kimlin)
- Institut für Biochemistry, Humboldt Universitat Berlin (Prof. Hermann-Georg Holzhütter);
- Lab. de Géochimie et d'Ecologie Marines Campus de Luminy Marseille (Dr. Gérald Gregori);