Curriculum Vitae _ Antonella Canini

Antonella Canini is Full Porfessor in Botany in the Faculty of Science at the University of Rome "Tor Vergata". She has obtained a PhD in Molecular and Cellular Biology and Specialization in Applied Biotechnology. Her expertise includes: the assemblage and use of microelectrodes in plant tissues; techniques of purification and localization of superoxide dismutase in free-living and symbiotic cyanobacteria; characterization of allergens by immonogold labelling; gas-chromatography techniques for the measurement of nitrogen fixation by cyanobacteria. She has acquired particular specialization in scanning and transmission electron microscopy and in the localization of elements by energy filtering TEM (ESI and EELS). She has focused her work on the set-up of biochemical and chromatographic techniques for separation and characterization of active molecules purified from vegetable. For this aim, She has activated a multidisciplinary research group, composed of chemists, immunologists, histologists, botanists, having all the expertises necessary for the characterization of natural compunds from medicinal plants that yield biological potential. In methanolic and acquous Carica papaya leaf extracts we have isolated the 5,7-dimetoxycoumarin, a compund showing a dose-dependent proliferative and healing affects on murine fibroblasts growth. She has defined fractionation schemes applied to high-pressure liquid chromatography techniques and gas chromatography-mass spectrometry in order to determine optimal systems for separation of alkaloids from medicinal plants. Interesting are the results obtained on the immunomodulatory effects produced by various alkaloids fractions from Sida acuta L and on the antiproliferative activity of the 5,7-dimethoxycoumarin identified in Carica papaya L. At Interdipartimental Center for Animal technologies, She has coordinated researchs for the screening of chemopreventive effects of african plants on animal models. Moreover, She works on the identification and chemopreventive role of nutraceutical isolated from melliferous wild plants localized in nature reserves. Teacher of Botany for the Courses of Molecular and Cellular Biology, Human Biology, and of Methodology in Botany in the Course of Ecology, and of Medicinal Plants in the Corse of Human and Evolutionary Biology. Teacher of "Sustainable uses of african medicinal plants" within the first level Master in "Transfer of technologies in biomedicine for emerging and developing countries". She is Director of the Course "Improving nutrional status of vulnerable camerounian peoples by honey and other products" and Director of Honey Research Center operating in the Department of Biology. In the last two years She aquired an expertise in the pollen analysis as tool for vegetational composition reconstruction of ecosystems. She has published 120 papers peer reviewed. She was responsible of a Project of Italian Cooperation with FAO, one of the Lazio Region and one of the Agriculturale and Forestry Ministery. Environmental Ministery and European Community. She took part to projects of CEE, CNR and MIUR. She is teacher and member of the PhD in Evolutionary Biology and Ecology.