LA RICERCA FARMACOGNOSTICA: ANNABELLA VITALONE

A) INFORMAZIONI PERSONALI

NOME Annabella		E-mail	annabella.vitalone@uniroma1.it
COGNOME Vitalone			
POSIZIONE	Ricercatore non confermato		

B) AFFILIAZIONE

ISTITUZIONE LABORATORIO INDIRIZZO TELEFONO FAX

Sapienza – Università di Roma		
Dip. di Fisiologia e Farmacologia		
P.le Aldo Moro 5, 00185 - Roma		
+39-06-49912520		
+39-06-49912480		

Web: http://	www.uniroma1.it	
Web: http://	w3.uniroma1.it/fisiofarm	

C) COMPONENTI DEL GRUPPO DI RICERCA

Team leader

1	Gabriela Mazzanti			
Others				
2	Sabina Mastrangelo			

D) LINEE DI RICERCA

Dr. Vitalone's research has focused on the assessment of hepatotoxicity of herbal drugs and on the adverse effects of herbal remedies, especially during pregnancy and breast feeding.

E) TECNOLOGIE

The hepatic effects of herbal drugs and remedies are evaluated by *in vitro* and in vivo analysis. In vivo studies on hepatotoxicity are performed by spettrophotometrical analysis. Particular attention is addressed to the role of oxidative stress in the hepatic injury. *In vitro* studies are carried out for the evaluation of cytotoxic effect (apoptosis, necrosis) on hepatic cell lines. Tests commonly utilized are MTT assay (cytotoxicity at mitochondrial level), trypan bleu exclusion test (cell membrane integrity), Hoechst staining (chromatin condensation as index of apoptosis). These *in vitro* technologies could be also applied for a series of *in vitro* screening assays on natural products, because they are quite inexpensive, and easily reproducible.

Data on the use and the adverse effects of herbal products are collected using an *ad hoc* form. For epidemiological study, in particular during pregnancy and breast feeding, participants are pregnant and lactating women who present themselves to selected private and public hospitals for routine checkups, to obstetric ambulatories, and pregnant (or breast feeding) women who go to pharmacies. Data processing is done by specific algorithm and statistical analysis.