Claudio G. Molinari

Curriculum vitae

Personal Data

Place and date of birth: Genova (Italy) 10/15/1958
Phone: +39.0321.660653
e-mail: claudio.molinari@med.uniupo.it
Skype: upo.fisiologia.cm

Bio and education

2013 – Degree in TCM and Acupuncture (ALMA, Milano, Italy).
1994 – Ph.D. in Physiology (University of Torino, Italy)
1987 – M.D. (University of Genoa, Italy)
1977-1987 - Internship in Human Physiology (Prof. G.L. Avanzino), University of Genova. Research topics: Neural Cardiovascular Control
1977 - High School Diploma, Program in the Humanities, Liceo Classico"G. Mazzini", Genova, Italy

University career

2003-	Associate Professor of Physiology (SSD BIO/09), Università del Piemonte Orientale
1996-2002	Assistant Professor of Physiology (SSD BIO/09), Università del Piemonte Orientale

University positions

2016-	Member of the Regional Commitee for Complementary Alternative Medicine..
2014-	President of the Parithetic Committee Teachers/Students of the School of Medicine

Scientific positions

2014-	Member of the Federazione Medico Sportiva Italiana.
1990-	Member of the Società Italiana di Ricerche Cardiovascolari
1988-	Member of the Società Italiana di Fisiologia

Main fields of interest

1. Vitamin D

2. Oxidative Stress
3. Heart Rate Variability
4. Blood Flow
5. Neural Cardiovascular Control

CURRENT ISSUES OF RESEARCH

1. "Extraskeletal effects of Vitamin D"

Tradizionalmente, il 1,25-diidrossicolecalciferolo (vitD) è considerato un ormone regolatore dell'omeostasi del calcio e del fosfato. Tuttavia, i risultati di studi recenti forniscono convincenti prove sul ruolo della vitD in altri processi biochimici in vari tessuti. Ad esempio, a livello cerebrale, questa vitamina può attraversare la barriera emato-encefalica e legarsi a specifici recettori nucleari; o ancora la vitD ha dimostrato importanti effetti a livello delle cellule endoteliali, promuovendone la proliferazione, la migrazione e la produzione di nitrossido.

2. "Health evaluation by means of heart rate variability assessment"

The analysis of heart rate variability (HRV) is used to assess the activity of the autonomic nervous system. Since the enormous importance of this part of the nervous system in stress control, in the immune system modulation, and in limiting the inflammatory processes, the goal of this research is to validate this method with objective parameters useful to assess the state of homeostatic balance of the organism.

3. "Role of polyphenols in oxidative stress control"

Polyphenols are a broad family of molecules with antioxidant properties widely present in the plants. However, a problem associated with their dietary intake is their low bioavailability. In particular they are present in the body fluids not in native form, but the form of metabolites as a result of an intense metabolism performed by intestine and liver. The purpose of this research is to study the known metabolites of some polyphenols (eg. resveratrol) to determine the bioavailability and the biological effects in association to the assessment of other parameters, such as the production of ROS.

4. "Role of low dose acetylcholine in wound healing"

Slow-healing wounds such as those of diabetic subjects or bedridden patients presenting classic pressure sores (decubitus) are still an unsolved health problem of great social impact. This line of research aims to use an innovative approach based on the modulation of an endogenous system of control of keratinocyte proliferation. This is the non-neuronal cholinergic system which is based on the application of acetylcholine with paracrine mechanism. This research is conducted using ultradiluite solutions of substance and therefore fits in the innovative trend of the so-called Low Dose Medicine.

CURRENT FUNDED PROJECTS

PROGRAMME	FUNDED PROJECT
Fondazione Goria e Fondazione CRT, Master dei Talenti della Società Civile 2015	UTILIZZO DI ACETILCOLINA ULTRADILUITA COME COADIUVANTE DELLA CICATRIZZAZIONE NELLE FERITE A LENTA RIMARGINAZIONE.
Fondazione Goria e Fondazione CRT, Master dei Talenti della Società Civile 2014	UTILIZZO DI ACETILCOLINA ULTRADILUITA COME COADIUVANTE DELLA CICATRIZZAZIONE NELLE FERITE A LENTA RIMARGINAZIONE.

TOP FIVE PAPERS

1. Uberti F, Lattuada D, Morsanuto V, Nava U, Bolis G, Vacca G, Squarzanti DF, Cisari C, Molinari C. Vitamin D protects human endothelial cells from oxidative stress through the autophagic and survival pathways. J Clin Endocrinol Metab. 2014 Apr;99(4):1367-74. doi: 10.1210/jc.2013-2103. Epub 2013 Nov 27. PubMed PMID: 24285680
2. Molinari C, Uberti F, Grossini E, Vacca G, Carda S, Invernizzi M, Cisari C. 1α,25-dihydroxycholecalciferol induces nitric oxide production in cultured endothelial cells. Cell Physiol Biochem. 2011;27(6):661-8.
3. Molinari C, Grossini E, Mary DA, Vacca G. Effect of distension of the gallbladder on plasma renin activity in anesthetized pigs. Circulation. 2000 May 30;101(21):2539-45
4. Vacca G, Battaglia A, Grossini E, Mary DA, Molinari C, Surico N. The effect of 17beta-oestradiol on regional blood flow in anaesthetized pigs. J Physiol. 1999 Feb 1;514 (Pt 3):875-84.
5. Ermirio R, Ruggeri P, Cogo CE, Molinari C, Calaresu FR. Neuronal and cardiovascular responses to ANF microinjected into the solitary nucleus. Am J Physiol. 1989 Feb;256(2 Pt 2):R577-82

FURTHER INFORMATION

2015 – Creation of the Academic spin-off “noiVita” co-founded with dr. Francesca Uberti.

2015 – Patent n. 15003678.8/EP15003678 del 29/12/2015.