Luigi Mario Castello

Curriculum vitae

PERSONAL DATA

Born in Ivrea (TO - Italy) on March $7^{\rm th}$, 1974

Resident of Ivrea (TO - Italy) Phone: +39-0321-3733097

E-mail: <u>luigi.castello@med.uniupo.it</u>

BIO AND EDUCATION

Born in Ivrea on March 7th, 1974, graduates from high school (Liceo Scientifico "A. Gramsci" in Ivrea) in 1993. In 1999 he gets MD degree *cum laude* at the Università di Pavia (Italy) with a thesis in Internal Medicine about efficacy of tricyclic antidepressants in the treatment of functional gastro-intestinal diseases. In 2005 he completes the residency program obtaining the Specialization title in Internal Medicine *cum laude* (Università del Piemonte Orientale "A. Avogadro" in Novara) with a thesis entitled "An *in vivo* study about Gas6 effect on the angiogenesis induced by FGF and VEGF." Since 2006 he is Assistant Professor in Internal Medicine at the Department of Clinical and Experimental Medicine (now Translational Medicine) of the Università del Piemonte Orientale in Novara. From 2006 to 2010 he works at the Internal Medicine Ward of the "Maggiore della Carità" Hospital in Novara. Since 2010 he moved to the Emergency Department of the same hospital.

UNIVERSITY CAREER

2006-	Researcher at the Department of Clinical and Experimental Medicine (now
	Translational Medicine), Università del Piemonte Orientale

UNIVERSITY POSITIONS

2015-	Member of the Senate as Representative of Teaching Staff of the Department of Translational Medicine, Università del Piemonte Orientale
2012-2015	Member of the Athenaeum Discipline Committee, Università del Piemonte Orientale
2010-	Member of the Committee of Internal Medicine Teachers (COLMED/09) as representative of the Università del Piemonte Orientale
2010-	Secretary of the Residency Program in Emergency Medicine, Università del Piemonte Orientale
2009-2011	Member of the Didactic Commission of the Nursing School, Università del Piemonte Orientale

SCIENTIFIC POSITIONS

2011-	Member of the Italian Society of Emergency Medicine
2000-	Member of the Italian Society of Internal Medicine

MAINFIELDS OF INTEREST

- 1. Sepsis and septic shock
- 2. Hydroelectrolytic balance derangements

CURRENTISSUES OF RESEARCH

1. Pathogenic and prognostic role of cellular signaling mediated by Gas6 and Mer in sepsis and septic shock

The recent revision of sepsis and septic shock definitions focused on the pathophysiologic mechanism of these conditions, which are considered to be the result of a disregulated host response to infections. Gas6 and Mer are the ligand and the receptor of an inflammatory signaling pathway. The aim of this research is to investigate the pathogenic role of these and other molecules (inflammatory mediators, autoantibodies, microvescicles) and to define their diagnostic and prognostic role.

2. Treatment strategies for hydroelectrolytic balance derangements on pathophysiologic basis

Hydroelectrolytic unbalances are common, mainly in the Emergency Department. Establishing the pathophysiologic mechanism they're based on makes a targeted treatment possible. This is mainly true for hyponatremia, the most frequent electrolyte derangement in clinical practice. The aim is to identify those clinical elements which lead to an accurate pathophysiologic diagnosis and to a proper therapy (fluids infusion in the presence of solute loss; aquaresis in the presence of fluid overload).

CURRENT FUNDED PROJECTS

PROGRAMME	FUNDED PROJECT
DiMeT 2015	RAISED AIM — "Pathogenic, diagnostic and prognostic role of
	autoantibodies, microvescicles and signaling molecules in sepsis
	and septic shock"

TOP FIVEPAPERS

- 1. Bartoli E, Castello L, Sainaghi PP. [Diagnosis and therapy of hyponatremia]. Ann Ital Med Int. 2003 Oct-Dec;18(4):193-203.
- 2. Castello L, Pirisi M, Sainaghi PP, Bartoli E. Hyponatremia in liver cirrhosis: pathophysiological principles of management. Dig Liver Dis. 2005 Feb;37(2):73-81.
- 3. Castello L, Pirisi M, Sainaghi PP, Bartoli E. Quantitative treatment of the hyponatremia of cirrhosis. Dig Liver Dis. 2005 Mar;37(3):176-80.
- 4. Sainaghi PP, Castello L, Bergamasco L, Galletti M, Bellosta P, Avanzi GC. Gas6 induces proliferation in prostate carcinoma cell lines expressing the Axl receptor. J Cell Physiol. 2005 Jul;204(1):36-44
- 5. Alciato F, Sainaghi PP, Sola D, Castello L, Avanzi GC. TNF-alpha, IL-6, and IL-1 expression is inhibited by GAS6 in monocytes/macrophages. J Leukoc Biol. 2010 May;87(5):869-75.