

## PERSONAL INFORMATION

**Rosangela Spiga**

**Sex** Female

**Date of birth** 02/07/1988

**Nationality** Italian

## EDUCATION AND TRAINING

1/11/2014-31/10/2017

**Ph.D. in Biomarkers of chronic and complex diseases**

EQF level 8

University "Magna Græcia" of Catanzaro, Catanzaro (Italy)

Thesis: "Low-grade systemic inflammation beneath cardiometabolic disease and aging";  
Final discussion: 20/03/2018

1/10/2014-18/02/2017

**M.Sc. in Pharmaceutical Biotechnology**

EQF level 7

University of Perugia, Perugia (Italy)

Thesis: "Sphingosine-1-phosphate (S1P): modulator of stem cells isolated from human amniotic fluid"  
Final grade: 110/110 with honor

1/10/2007-18/10/2014

**B.Sc. in Biotechnology**

EQF level 6

University of Perugia, Perugia (Italy)

Thesis: "Mutagenesis of the catalytic site of the enzyme Indoleamine 2,3-dioxygenase (IDO)"  
Final grade: 107/110

09/2001-07/2007

**High school diploma**

EQF level 4

Math and Science Academy "Pier Paolo Pasolini", Potenza (Italy)

Final grade: 90/100

## WORK EXPERIENCE

01/02/2019-31/01/2021

**Research Fellow**

University "Magna Graecia" of Catanzaro, Catanzaro, Italy

Project: "Glucagon effects on the expression of hepatic inflammatory markers"

01/11/2016-31/10/2017

**Visiting Research Student**

Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Barcelona (Spain)

Research activity on the cardiovascular complications of diabetes, linked to inflammation and senescence, in collaboration with the research group directed by Prof. A. Ceriello.

PERSONAL SKILLS

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Spanish	B2	B2	B2	B2	B2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Job-related skills

Research interests:

- Genetics of insulin-resistance, type 2 diabetes mellitus, obesity, cardiovascular diseases and hypertension.
- Molecular mechanisms of inflammation during endothelial dysfunction and cardiovascular disease.
- Association of Uric Acid with Inflammatory Biomarkers in Hepatic Cells.
- Cardiovascular complications of diabetes, linked to inflammation and senescence.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user

Good command of office suite (word processor, spread sheet, presentation software)

Driving licence B

ADDITIONAL INFORMATION

Certifications

2014 National Board Certification for Biologists

## Publications

Author/co-author of 16 original papers published in peer-reviewed journals indexed on PubMed

Mancuso E, **Spiga R**, Rubino M, Averta C, Rotundo S, Segura-Garcia C, Mannino GC, Sesti G, Andreozzi F. Effects of Alpha-2-HS-glycoprotein on cognitive and emotional assessment in prediabetic and diabetic subjects. *J Affect Disord*. 2020 Dec 29;282:700-706. doi: 10.1016/j.jad.2020.12.135. Epub ahead of print. PMID: 33445096.

Prattichizzo F, De Nigris V, Sabbatinelli J, Giuliani A, Castaño C, Párrizas M, Crespo I, Grimaldi A, Baranzini N, **Spiga R**, Mancuso E, Rippo MR, Procopio AD, Novials A, Bonfigli AR, Garavelli S, La Sala L, Matarese G, de Candia P, Olivieri F, Ceriello A. CD31 Positive-Extracellular Vesicles from Patients with Type 2 Diabetes Shuttle a miRNA Signature Associated with Cardiovascular Complications. *Diabetes*. 2020 Oct 23;db200199. doi: 10.2337/db20-0199. Epub ahead of print. PMID: 33097483.

Mancuso E, Mannino GC, Fuoco A, Leo A, Citraro R, Averta C, **Spiga R**, Russo E, De Sarro G, Andreozzi F, Sesti G. HDL (High-Density Lipoprotein) and ApoA-1 Potentially Modulate Pancreatic  $\alpha$ -Cell Glucagon Secretion. *Arterioscler Thromb Vasc Biol*. 2020 Oct 22: ATVBaha120314640. doi: 10.1161/ATVBaha.120.314640. Epub ahead of print. PMID: 33086869.

Mancuso E, Perticone M, **Spiga R**, Averta C, Rubino M, Fiorentino TV, Miceli S, Mannino GC, Sciacqua A, Succurro E, Perticone F, Sesti G, Andreozzi F. Association between Serum  $Mg^{2+}$  Concentrations and Cardiovascular Organ Damage in a Cohort of Adult Subjects. *Nutrients*. 2020 Apr 29;12(5):1264. doi: 10.3390/nu12051264. PMID: 32365559; PMCID: PMC7282033.

Mannino GC, Pezzilli S, Averta C, Fuoco A, **Spiga R**, Mancuso E, Di Fatta C, Perticone F, Prudente S, Trischitta V, Andreozzi F, Sesti G. A functional variant of the dimethylarginine dimethylaminohydrolase-2 gene is associated with myocardial infarction in type 2 diabetic patients. *Cardiovasc Diabetol*. 2019 Aug 13;18(1):102. doi: 10.1186/s12933-019-0906-1. PMID: 31409409; PMCID: PMC6693196.

**Spiga R**, Mannino GC, Mancuso E, Averta C, Paone C, Rubino M, Sciacqua A, Succurro E, Perticone F, Andreozzi F, Sesti G. Are Circulating  $Mg^{2+}$  Levels Associated with Glucose Tolerance Profiles and Incident Type 2 Diabetes? *Nutrients*. 2019 Oct 14;11(10):2460. doi: 10.3390/nu11102460. PMID: 31615167; PMCID: PMC6835462.

Mannino GC, Fuoco A, Marini MA, **Spiga R**, Di Fatta C, Mancuso E, Perticone F, Andreozzi F, Sesti G. The polymorphism rs35767 at IGF1 locus is associated with serum urate levels. *Scientific Reports*. 2018 Aug 16; 8:12255. doi:10.1038/s41598-018-29665-3.

De Nigris V, Prattichizzo F, Mancuso E, **Spiga R**, Pujadas G, Ceriello A. Tenebligiptin enhances the beneficial effects of GLP-1 in endothelial cells exposed to hyperglycemic conditions. *Oncotarget*. 2017 Dec 1; 9(10):8898-8910. doi: 10.18632/oncotarget.22849. eCollection 2018 Feb 6.

Prattichizzo F, De Nigris V, Mancuso E, **Spiga R**, Giuliani A, Matakchione G, Lazzarini R, Marcheselli F, Recchioni R, Testa R, La Sala L, Rippo MR, Procopio AD, Olivieri F, Ceriello A. Short-term sustained hyperglycaemia fosters an archetypal senescence-associated secretory phenotype in endothelial cells and macrophages. *Redox Biol*. 2018 May ;15:170-181. doi: 10.1016/j.redox.2017.12.001. Epub 2017 Dec 6.

Prattichizzo F, De Nigris V, **Spiga R**, Mancuso E, La Sala L, Antonicelli R, Testa R, Procopio AD, Olivieri F, Ceriello A. Inflammageing and metaflammation: The yin and yang of type 2 diabetes. *Ageing Res Rev*. 2018 Jan; 41:1-17. doi: 10.1016/j.arr.2017.10.003. Epub 2017 Oct 31. Review.

Mancuso E, Mannino GC, Fatta CD, Fuoco A, **Spiga R**, Andreozzi F, Sesti G. Insulin-like growth factor-1 is a negative modulator of glucagon secretion. *Oncotarget*. 2017 Jun 16; 8(31):51719-51732. doi: 10.18632/oncotarget.18514. eCollection 2017 Aug 1.

Andreozzi F, Mannino GC, Mancuso E, **Spiga R**, Perticone F, Sesti G. Plasma kisspeptin levels are associated with insulin secretion in nondiabetic individuals. *PLoS One*. 2017 Jun 21; 12(6):e0179834. doi: 10.1371/journal.pone.0179834. eCollection 2017.

**Spiga R**, Marini MA, Mancuso E, Di Fatta C, Fuoco A, Perticone F, Andreozzi F, Mannino GC, Sesti G. Uric Acid Is Associated With Inflammatory Biomarkers and Induces Inflammation Via Activating the NF- $\kappa$ B Signaling Pathway in HepG2 Cells. *Arterioscler Thromb Vasc Biol.* 2017 Jun ;37(6):1241-1249. doi:10.1161/ATVBAHA.117.309128. Epub 2017 Apr 13.

Palleria C, Leo A, Andreozzi F, Citraro R, Iannone M, **Spiga R**, Sesti G, Constanti A, De Sarro G, Arturi F, Russo E. Liraglutide prevents cognitive decline in a rat model of streptozotocin-induced diabetes independently from its peripheral metabolic effects. *Behav Brain Res.* 2017 Mar 15; 321:157-169. doi: 10.1016/j.bbr.2017.01.004. Epub 2017 Jan 3.

Russo E, Leo A, Crupi R, Aiello R, Lippiello P, **Spiga R**, Chimirri S, Citraro R, Cuzzocrea S, Constanti A, De Sarro G. Everolimus improves memory and learning while worsening depressive- and anxiety-like behavior in an animal model of depression. *J Psychiatr Res.* 2016 Jul; 78:1-10. doi: 10.1016/j.jpsychires.2016.03.008. Epub 2016 Mar 19.

Hribal ML, Mancuso E, **Spiga R**, Mannino GC, Fiorentino TV, Andreozzi F, Sesti G. PHLPP phosphatases as a therapeutic target in insulin resistance-related diseases. *Expert Opin Ther Targets.* 2016 Jun; 20(6):663-75. doi: 10.1517/14728222.2016.1130822. Epub 2016 Jan 11. Review.

#### Data and Privacy

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