

## Curriculum vitae

### Personal data

**Name:** Maria Domenica Sanna

**Born:** 14/10/1985 Ozieri (SS)

**Nationality:** italian

**E-mail:** [maria.sanna@unifi.it](mailto:maria.sanna@unifi.it)

### Academic background

**2008-2009**    **Thesis work:** PKC-mediated HuD-GAP43 pathway activation in a mouse model of antiretroviral neuropathy. Submitted

**2009-2010**    **Graduation in pharmaceutical chemistry and technology (CTF) (110/110)**  
University of Florence, Italy.

**2013 -**        **PhD. in Pharmacology**  
University of Florence  
Advisors: Prof. Dr. Nicoletta Galeotti e Prof. Dr. Carla Ghelardini

### Research experiences

#### 02/2011-07/2011 Post Laurea Bursary

University of Florence, Dept. of Pharmacology M.Aiazzi Mancini, Florence, Italy

Research Project:

Expression of cannabinoid receptors in osteoclasts of women with osteoporosis

Advisor: Prof. Dr. Carla Ghelardini

#### 12/2011-09/2012 Post Laurea Bursary

University of Florence, Dept. of Pharmacology M.Aiazzi Mancini, Florence, Italy

Research Project:

"Investigation on the mechanisms of signal transduction pathways modulated by CB1 receptors in osteoclasts of women with osteoporosis"

Advisor: Prof. Dr. Carla Ghelardini

#### Research Skills:

- Research on central nervous system (neuropathic pain, mood disorders).
- Behavioral pharmacology experiences: forced swimming, tail suspension (depression), light-dark box (anxiety) hot and cold plate, von Frey's, plantar test, paw pressure (pain) rota-rod, hole-board, Irwin test (locomotor activity), object recognition, passive avoidance, social learning interaction (learning and memory).
- In vitro assays experiences: western blotting, immunoprecipitation, immunohistochemistry, immunofluorescence.

### Fellowships

25/26-6- 12        Learning new experimental techniques on animal models: Dipartimento di Medicina Sperimentale della Seconda Università di Napoli.

21/25-7-13        Collaboration to project: Role of JNK<sub>1/2/3</sub> KO in a model of peripheral neuropathy. NICO, Neuroscience institute Cavalieri Ottolenghi.

## **Training/experience of English**

2007/2012 Individual summer lessons: Inlingua School, Sassari

08/2013 English course: Emerald Institute, Dublin

08/2014 English course: EF school , Manchester

Level of understanding/speaking: B2

## **Hobbies**

Volunteer AISM (Multiple Sclerosis Italian Association), Onlus Stand Up For Life.

## **Publications**

### **Published papers**

GALEOTTI, N.; SANNA, M.D.; GHELARDINI, C. (2013). Pleiotropic effect of histamine H4 receptor modulation in the central nervous system. *Neuropharmacology*. 71, 141-147.

SANNA M.D., QUATTRONE, A, GHELARDINI C, GALEOTTI N. (2014). PKC-mediated HuD-GAP43 pathway activation in a mouse model of antiretroviral painful neuropathy. *Pharmacol Res*. 81, 44-53.

BIBIANA MOZZAQUATRO GAI, MARIA DOMENICA SANNA, ANDRÉ LUIZ STEIN, GILSON ZENI, NICOLETTA GALEOTTI, CRISTINA WAYNE NOGUEIRA (2014). ERK1/2 phosphorylation is involved in the antidepressant-like action of 2,5-diphenyl-3-(4-fluorophenylseleno)-selenophene in mice. *European Journal of Pharmacology*. 736, 44-54.

M.D. SANNA, A. QUATTRONE, T. MELLO, C. GHELARDINI, N. GALEOTTI (2014). The RNA-binding protein HuD promotes spinal GAP43 overexpression in antiretroviral-induced neuropathy. *Experimental Neurology*. 26, 343-353.

M.D. SANNA, C. GHELARDINI, N. GALEOTTI (2014). Regionally selective activation of ERK and JNK in morphine paradoxical hyperalgesia: A step toward improving opioid pain therapy. *Neuropharmacology*. 86C:67-77.

M.D. SANNA, N. GALEOTTI, L. LUCARINI, C. LANZI, H. STARK, C. GHELARDINI, E. MASINI (2014). Histamine H<sub>4</sub> receptor activation induces antinociception in a neuropathic pain model. *Inflamm. Res*. 63 (Suppl 1):S1–S48.

## **Works published in proceedings of conferences**

M.D. Sanna, N. Galeotti, C. Ghelardini. Involvement of protein kinase C in neuronal regeneration in a model of antiretroviral-induced painful peripheral neuropathy in mice. Congress Sif 2011 Bologna, Italy. Poster.

M.D. Sanna, N. Galeotti, C. Ghelardini. Identification of CB1 signaling pathway in osteoclasts from osteoporotic women. Convegno Monotematico SIF Cannabinoidi: presente e futuro 2012 Ferrara, Italy. Poster.

M.D. Sanna, N. Galeotti, C. Ghelardini. The RNA-binding protein HuD: increased expression and localization in neuroregenerative process during antiretroviral therapy. Convegno Monotematico SIF La ricerca farmacologica sul Dolore: dai modelli comportamentali all'epigenetica Bologna, Italy, 2012. Poster.

M.D. Sanna, N. Galeotti, C. Ghelardini. Activation of mitogen-activated protein kinase and involvement in PKC signaling pathway in the development of morphine-induced hyperalgesia. Congress Sif 2013 Torin, Italy. Poster.

M.D. Sanna, B. Mozzaquatro Gai, , A.L. Stein, Z. Gilson Zen, N. Galeotti, C.W. Nogueira. ERK1/2 phosphorylation is involved in the antidepressant-like action of 2,5-diphenyl-3-(4-fluorophenylseleno)-selenophene in mice. Convegno Monotematico SIF: mood disorders: from neurobiology to novel therapeutic strategies. 2014 Modena, Italy. Poster.

M.D. Sanna, N. Galeotti, L. Lucarini, C. Lanzi, H. Stark, C. Ghelardini, E. Masini. Histamine H4 receptor activation induces antinociception in a neuropathic pain model. European Histamine Research Society Congress. 2014 Lyon, France. Oral communication.

## **Awards**

Poster prize: Involvement of protein kinase C in neuronal regeneration in a model of antiretroviral-induced painful peripheral neuropathy in mice. Congress Sif 2011 Bologna, Italy.

Bursary winner: European Histamine Research Society Congress. 2014 Lyon, France.

Early Career Award winner: European Histamine Research Society Congress. 2014 Lyon, France.

## **Society membership**

Italian Society of Pharmacology (SIF)  
European Histamine Research Society (EHRS)