

PERSONAL INFORMATION

Camilla Fusi



Sex Female | Date of birth 20/11/1985 | Nationality Italian

WORK EXPERIENCE

Feb 2015-now

Italian Pharmacology Society Fellowship (Feb 2015 - Feb 2016)*Health Sciences Department - Clinical Pharmacology and Oncology Unit, University of Florence, Florence, Italy*

- Research topic: role of oxidative stress in TRPA1-dependent painful states induced by third-generation aromatase inhibitors.

Jan 2015

Research Fellow (Jan 2015 - Feb 2015)*Health Sciences Department - Clinical Pharmacology and Oncology Unit, University of Florence, Florence, Italy*

- Research topic: study of the role of Transient Receptor Potential Ankyrin 1 (TRPA1) in sepsis.

Jan 2012-Dec 2014

Ph.D. in Clinical Sciences - Physiopathology of Aging*Health Sciences Department - Clinical Pharmacology and Oncology Unit, University of Florence, Florence, Italy*

- Research topic: study of the role of TRPA1 channel in chronic pain states. A substantial part of the scientific production has been dedicated to investigate the role of TRP channels, and in particular of TRPA1, in the mechanisms underlying chemotherapy-related neuropathic pain. During this period I was involved in pain research both on *in vitro* and *in vivo* experimental settings.

Mar 2011-Dec 2011

Research fellow*Health Sciences Department - Clinical Pharmacology and Oncology Unit, University of Florence, Florence, Italy*

- Research topic: study of the role of TRPA1 channel, localized to neuronal and non-neuronal cells, in chronic inflammatory states. Characterization of TRPA1 distribution on epithelial cells in human and rodent airways and study of its role in inflammatory response. In this year the scientific activity was focused on the role of a subset of primary sensory neurons in neurogenic inflammation in the airways.

EDUCATION AND TRAINING

- 2015 Ph.D. in Clinical Sciences - Physiopathology of Aging, University of Florence, Italy
Title of the thesis: *"Role of Transient Receptor Potential Ankyrin 1 (TRPA1) channel in anticancer drugs-induced peripheral neuropathy and pain"*.
- 2008-2010 Master's Degree in Cellular and Molecular Biology, University of Florence, Italy.
Title of the thesis: *"Role of cyclooxygenase-2 in sphingosine 1-phosphate-induced myogenic differentiation"*.
Final mark: 110/110 cum laude.
- 2004-2008 Bachelor's degree in Biological Sciences, University of Florence, Italy.
Title of the thesis: *"Immunohistochemical analysis of nuclear markers expression in Dukes A colorectal adenocarcinomas"*.
Final mark: 110/110 cum laude.
- 1999-2004 Scientific high school diploma, Florence, Italy.
Final mark: 100/100 cum laude

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s) English

Job-related skills

- Excellent knowledge of standard laboratory procedures.
- Excellent experience in calcium imaging techniques, western immunoblotting, ELISA, bacterial cultures and plasmid extraction, transient cellular transfection. Basic experience in immunohistochemistry and immunofluorescence.
- Excellent experience in cell culture techniques; rat, mouse, guinea pig primary sensitive neurons cell cultures preparation.
- Basic experience with animal handling. Behavioural experiments: acute nociception, mechanical stimulation through Von Frey hair test to assess mechanical allodynia, thermal stimulation through acetone test to assess cold hypersensitivity.

Computer skills

- Excellent command of Microsoft Office™ tools
- Good command of GraphPad Prism™ (software tool to analyze, graph and present scientific data)
- Excellent command of Thomson Reuters EndNote™ (software tool for publishing and managing bibliographies, citations and references)
- Good command of Origin

Driving licence ▪ B

ADDITIONAL INFORMATION**Awards**

Financial aid award to attend the 15th World Congress on Pain in Buenos Aires, Argentina (Oct 2014)

Fellowships

2015 Fellowship of the Italian Pharmacology Society (Feb 2015 – Feb 2016)

2015 Fellowship of the University of Florence (Jan - Feb)

- 2012-2014 Ph.D. Fellowship of the University of Florence (Jan 2012 - Dec 2014)
- 2011 Fellowship of the University of Florence (Mar - Dec)

Publications

Research articles

1. Nassini R, **Fusi C**, Materazzi S, Coppi E, Tuccinadi T, Marone I, De Logu F, Preti D, Tonello R, Chiarugi A, Patacchini R, Geppetti P, Benemei S (2015). The TRPA1 channel mediates the analgesic action of dipyrone and pyrazolone derivatives. *Br J Pharmacol*. 13: 3397-411.
2. **Fusi C**, Materazzi S, Benemei S, Coppi E, Trevisan G, Marone I.M., Minocci D, De Logu F, Tuccinardi T, Di Tommaso M.R., Susini T, Moneti G, Pieraccini G, Geppetti P, Nassini R (2014). Steroidal and non-steroidal third-generation aromatase inhibitors induce pain-like symptoms via TRPA1. *Nat Commun*. 5:5736
3. Trevisan G, Hoffmeister C, Rossato MF, Oliveira SM, Silva MA, Silva CR, **Fusi C**, Tonello R, Minocci D, Guerra GP, Materazzi S, Nassini R, Geppetti P, Ferreira J (2014). TRPA1 receptor stimulation by hydrogen peroxide is critical to trigger hyperalgesia and inflammation in a model of acute gout. *Free Radic Biol Med* 72: 200-9.
4. **Fusi C**, Materazzi S, Minocci D, Maio, V, Oranges, T, Massi, D, Nassini, R (2014). Transient Receptor Potential Vanilloid 4 (TRPV4) Is Downregulated in Keratinocytes in Human Non-Melanoma Skin Cancer. *J Invest Dermatol* 134(9):2408-17.
5. Materazzi S, Benemei S, **Fusi C**, Galdani R, De Siena G, Vastani N, Andersson DA, Trevisan G, Moncelli MR, Wei X, Dussor G, Pollastro F, Patacchini R, Appendino G, Geppetti P, Nassini R (2013). Parthenolide inhibits nociception and neurogenic vasodilatation in the trigeminovascular system by targeting the TRPA1 channel. *Pain* 154: 2750-8.
6. Trevisan G, Hoffmeister C, Rossato MF, Oliveira SM, Silva MA, Ineu RP, Guerra GP, Materazzi S, **Fusi C**, Nassini R, Geppetti P, Ferreira J (2013). Transient receptor potential ankyrin 1 receptor stimulation by hydrogen peroxide is critical to trigger pain during monosodium urate-induced inflammation in rodents. *Arthritis Rheum* 65: 2984-95.
7. Trevisan G, Materazzi S, **Fusi C**, Altomare A, Aldini G, Lodovici M, Patacchini R, Geppetti P, Nassini R (2013). Novel therapeutic strategy to prevent chemotherapy-induced persistent sensory neuropathy by TRPA1 blockade. *Cancer Res* 73: 3120-31.
8. Nassini R, Pedretti P, Moretto N, **Fusi C**, Carnini C, Facchinetti F, Viscomi AR, Pisano AR, Stokesberry S, Brunmark C, Svitacheva N, McGarvey L, Patacchini R, Damholt AB, Geppetti P, Materazzi S (2012). Transient receptor potential ankyrin 1 channel localized to non-neuronal airway cells promotes non-neurogenic inflammation. *PLoS One* 7: e42454.
9. Baraldi PG, Romagnoli R, Saponaro G, Aghazadeh Tabrizi M, Baraldi S, Pedretti P, **Fusi C**, Nassini R, Materazzi S, Geppetti P, Preti D (2012). 7-Substituted-pyrrolo[3,2-d]pyrimidine-2,4-dione derivatives as antagonists of the transient receptor potential ankyrin 1 (TRPA1) channel: a promising approach for treating pain and inflammation. *Bioorg Med Chem* 20: 1690-8.
10. Materazzi S, **Fusi C**, Benemei S, Pedretti P, Patacchini R, Nilius B, Prenen J, Creminon C, Geppetti P, Nassini R (2012). TRPA1 and TRPV4 mediate paclitaxel-induced peripheral neuropathy in mice via a glutathione-sensitive mechanism. *Pflugers Arch* 463: 561-9.

Reviews

1. Benemei S, **Fusi C**, Trevisan G, Geppetti P (2013). The TRPA1 channel in migraine mechanism and treatment. *Br J Pharmacol* 171: 2552-67.
2. Benemei S, De Cesaris F, **Fusi C**, Rossi E, Lupi C, Geppetti P (2013). TRPA1 and other TRP channels in migraine. *J Headache Pain* 14: 71.
3. Nassini R, Benemei S, **Fusi C**, Trevisan G, Materazzi S (2013). Transient receptor potential channels in chemotherapy-induced neuropathy. *The Open Pain Journal* 6: 127-136

International Conferences

XV World Congress on Pain (IASP), 10.2014, Buenos Aires, Argentina

C. Fusi, S. Materazzi, D. Minocci, V. Maio, T. Orange, D. Massi, R. Nassini. Transient Receptor Potential Vanilloid 4 (TRPV4) is down-regulated in keratinocytes in human non-melanoma skin cancer. (poster)

G. Trevisan, R. Nassini, S. Materazzi, **C. Fusi**, G. De Siena, M.F. Rossato, J. Ferreira, P. Geppetti. Transient receptor potential ankyrin 1 blockage reduced hyperalgesia in a model of trigeminal neuralgia in mice. (poster)

International workshop on Transient Receptor Potential Channels, 09.2012, Valencia, Spain

C. Fusi, R. Nassini, P. Pedretti, N. Moretto, C. Carnini, F. Facchinetti, R. Patacchini, P. Geppetti, and S. Materazzi. TRPA1 channel is expressed in non-neuronal pulmonary cells and promotes non-neurogenic inflammation. (poster)

BPS Focused Meeting on Neuropeptide, 06.2012, London

C. Fusi, S. Materazzi, P. Pedretti, N. Moretto, C. Carnini, F. Facchinetti, R. Patacchini, P. Geppetti and R. Nassini. The transient receptor potential ankyrin 1 channel localized to non-neuronal airway cells promotes non-neurogenic inflammation. (poster)

National Conferences

XVII National Congress for PhD student Italian Society of Pharmacology (SIF), 09.2014, Rimini, Italy

C. Fusi, S. Materazzi, S. Benemei, E. Coppi, G. Trevisan, I. M. Marone, D. Minocci, F. De Logu, P. Geppetti, R. Nassini. Third-generation aromatase inhibitors selectively activate TRPA1 channels on nociceptive sensory neurons producing pain. (oral communication)

XXXVI National Congress Italian Society of Pharmacology (SIF), 10.2013, Torino, Italy

C. Fusi, R. Nassini, S. Benemei, D. Minocci, P. Geppetti, S. Materazzi. Exemestane, a steroidal aromatase inhibitor, activates the TRPA1 channel on sensory neurons causing pain. (poster)

V Monothematic Congress of the Italian Society of Pharmacology (SIF), 11.2012, Bologna, Italy

R. Nassini, **C. Fusi**, S. Benemei, R. Patacchini, B. Nilius, J. Prenen, P. Geppetti, S. Materazzi. Chemotherapy-induced peripheral neuropathy: role of transient receptor potential channels. (poster)

XIV World Congress on Pain (IASP), 08.2012, Milano, Italy

C. Fusi, V. Maio, S. Materazzi, T. Orange, P. Pedretti, D. Massi, R. Nassini. TRPV4 is downregulated in keratinocytes in different human skin tumors. (poster)

XXXV National Congress of the Italian Society of Pharmacology (SIF), 09.2011, Bologna, Italy

P. Pedretti, **C. Fusi**, D. Preti, S. Materazzi, R. Nassini, P.G. Baraldi and P. Geppetti. Discovery And Pharmacological Evaluation Of A New Family Of TRPA1 Antagonists. (poster)

Memberships

International Association for the Study of Pain (IASP)

Italian Society of Pharmacology (SIF)

TEACHING

Tutoring

Training of a master student in standard laboratory procedures, cell cultures techniques, isolation of primary sensory neurons, calcium imaging and western immunoblotting.

