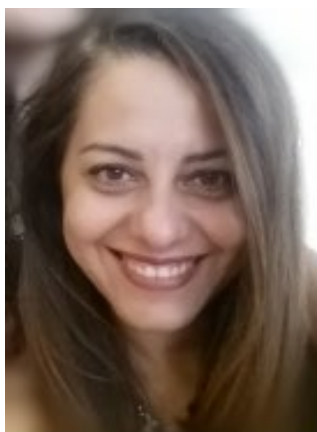


## PERSONAL INFORMATION



Annunziata Laurino, PhD

📍 Department of Molecular and Developmental Medicine, University of Siena, Siena, Italy.

✉ annunziata.laurino@unisi.it

CURRENT POSITION  
From 01/03/2022

**Researcher**  
Department of Molecular and Developmental Medicine, University of Siena, Siena, Italy.

From 18/11/2019

**Clinical Pharmacology and Toxicology resident**  
AOUC Careggi Hospital – University of Florence, Florence (Italy)

WORK EXPERIENCE  
01/07/2020 - 31/12/2021

**Postdoctoral Fellowship**  
Department of Neurofarba, University of Florence, Florence (Italy)  
▪ Differentiation of skeletal myofibers and satellite cells from induced pluripotent stem cells obtained from Patients with DMD, Resp. Raffaele Coppini/ Role of thyroid hormone signalling on Ca<sup>++</sup> homeostasis in resident skeletal muscle stem cells: possible new strategies for treating sarcopenia, Resp. Laura Sartiani, supported by Fondazione Cassa di Risparmio di Firenze

01/01/2020 - 30/06/2020

**Secondary School Teacher**  
ISIS Leonardo da Vinci, Via del Terzolle, 91, Florence (Italy)

01/01/2018 - 31/12/2019

**Postdoctoral fellowship**  
LENS – Physics Department, University of Florence, Florence (Italy)  
▪ Developing a multiple staining and mapping human hippocampus with high resolution microscopy/ Mapping of neuronal activation during consolidation of memory with high-resolution microscopy of entire mouse brain Prof. Francesco Pavone

01/12/2016 - 30/11/2017

**Postdoctoral fellowship**  
Department of Neurofarba, University of Florence, Florence (Italy)  
▪ Molecular mechanism and new therapeutic approaches in atrial fibrillation prof. Alessandro Mugelli, prof. Laura Raimondi

30/11/2013 - 29/11/2016

**PhD Student**  
Department of Neurofarba, University of Florence, Florence (Italy)  
▪ Characterization of 3-iodothyroacetic acid pharmacological profile: from itch to neuroprotection Scientific Tutor: prof. Laura Raimondi

01/10/2013 - 31/10/2013

**Quality Assurance Internship**  
Anallergo s.r.l.  
▪ SOP and IO review and drafting according to cGMP, Process validation, OOS management

22/12/2012 - 30/09/2013

**Visiting Researcher**  
Department of Neurofarba, University of Florence, Florence (Italy)

- Pharmacological effects of thyroid hormone derivatives
- Prof: Laura Raimondi

21/12/2011 - 21/12/2012

**Internal Student****Department of Pharmacology, University of Florence, Florence (Italy)**

- Binding Profile characterization on Muscarinic system of thyroid hormone derivatives
- Prof: Laura Raimondi, Prof. Rosanna Matucci

**EDUCATION AND TRAINING**

24/02/2017

**PhD in Drug Area and Innovative Treatments (Pharmacology, Toxicology and Innovative Treatments)**  
University of Florence, Florence, Italy

15/07/2013

**Enabled to the profession of Pharmacist**

276/300

University of Florence, Florence, Italy

21/12/2012

**Master degree in Pharmaceutical Chemistry and Technology**

104/110

University of Florence, Florence, Italy

30/07/2006

**High school diploma**

95/100

Scientific High School G. Peano, Marsico Nuovo (PZ), Italy

**RESEARCH SKILLS****Behavioural methods**

- forced swimming, tail suspension, passive avoidance, fear conditioning, rota-rod, hot plate, cold plate, hole-board, pentilenetetrazole-induced seizures, plasma glycemia, feeding behaviour paradigms, Wire Hanging Test

**Imaging techniques**

- immunocytochemistry and immunofluorescence, innovative clearing and staining methods (CLARITY, SWITCH), Ca<sup>2+</sup> imaging

**In vitro binding assays**

- GABA-benzodiazepine receptor complex: 3[H]flumazenil, nicotinic receptor: 3[H]cytisine, muscarinic receptor: 3[H]scopolamine

**In vitro enzyme assays**

- MAO-A, MAO-B and SSAO activity (14[C]5-hydroxytryptamine, 14[C]benzylamine, 14[C]tyramine)

**Cellular and Molecular Biology techniques**

- Protein quantification, Western Blot, Cell Culture (including primary cultures, stem cells, iPS, differentiation methods), Cell adhesion and migration.

**PRIZES AND GRANTS**

20/11/2018

- Young Researchers SIF Farmindustria 2018 Award

13/11/2018

- Edmund Optics 2018 Educational Award

23/11/2019

- Best Oral Communication at SIF National Meeting 2019, Firenze

14/09/2020

- Fondazione Sapienza - Valentina De Castro Award 2020

30/01/2021

- Fondazione Cassa Di Risparmio di Firenze – Giovani Ricercatori Protagonisti

OTHER SCIENTIFIC  
COMMITMENTS

- National Scientific qualification as associate in the Italian higher education system, for the disciplinary field of 05/G1 -Pharmacology, clinical pharmacology and pharmacognosy.
- Member of SIF (Società Italiana di Farmacologia), SINS (Società Italiana di Neuroscienze), ETA (European Thyroid Association), SIRC (Società Italiana di Ricerche Cardiovascolari)
- Member of the reviewer board of International Journal of Molecular Science
- Member of the editorial board of Frontiers in Endocrinology
- Reviewer for Molecular Neurobiology and Somatosensory & Motor Research
- Guest Editor for the Special Issues "Thyroid Hormone and Thyroid Hormone-Related Compounds: Molecular Pathways and Effects", IJMS and

## TEACHING EXPERIENCE

From 2013

Undergraduate students and PhD candidates supervision

From 2021

Teaching assistant in Pharmacology (SSD BIO/14)

From 2022

Assistant Professor in Histology (SSD BIO/17)

SELECTED PUBLICATIONS IN  
PEER-REVIEWED JOURNALSBibliometric Indicators:  
SCOPUS (2015-2022)

Total documents: 41

H-index: 15

Total citations: 490

Gencarelli M, Lodovici M, Bellusci L, Raimondi L, Laurino A (2022). Redox Properties of 3-Iodothyronamine (T1AM) and 3-Iodothyroacetic Acid (TA1). Int J Mol Sci. 23, 2718

Pesce L\*, Laurino A\*, Scardigli M, Yang J, Boas DA, Hof PR, Destrieux C, Costantini I, Pavone FS (2022) Exploring the human cerebral cortex using confocal microscopy. Progress in Biophysics and Molecular Biology 168, 3-9

Laurino A\*, Spinelli V\*, Gencarelli M\*, Balducci V, Dini L, Diolaiuti L, Ghionzoli M, Messineo A, Mugelli A, Cerbai E, Raimondi L, Sartiani L. (2019) Angiotensin-II Drives Human Satellite Cells Toward Hypertrophy and Myofibroblast Trans-Differentiation by Two Independent Pathways. Int J Mol Sci. 20, 4912

Laurino A\*, Landucci E\*, Resta F, De Siena G, Pellegrini-Giampietro DE, A Masi, Mannaioni G, Raimondi L (2018) Anticonvulsant and Neuroprotective Effects of the Thyroid Hormone Metabolite 3-Iodothyroacetic Acid Thyroid 28, 1387-97

Bellusci L\*, Laurino A\*, Sabatini M\*, Sestito S, Lenzi P, Raimondi L, Rapposelli S, Biagioni S, Fornai F, Salvetti A, Rossi L, Zucchi R, Chiellini G (2017) New Insights into the Potential Roles of 3-Iodothyronamine (T1AM) and Newly Developed Thyronamine-Like TAAR1 Agonists in Neuroprotection Frontiers in pharmacology 8, 905

Laurino A, De Siena G, Resta F, Masi A, Musilli C, Zucchi R, Raimondi L. (2015) 3-iodothyroacetic acid, a metabolite of thyroid hormone, induces itch and reduces threshold to noxious and to painful heat stimuli in mice. British Journal of Pharmacology 172, 1859-1868

SELECTED ORAL  
COMMUNICATIONSNational and international  
meetings

Laurino A, Gencarelli M, Balducci V, Sacconi L, Cameli M, Sartiani L, Cerbai E (2022) Interleukin 6 rapidly modifies Hyperpolarization-activated Cyclic nucleotide-gated (HCN) channel expression in vitro and its level is linearly related to HCN isoforms in human atria SIRC 2021

Laurino A, Gencarelli M, Lodovici M, Raimondi L. 3-iodothyronamine (T1AM), a thyroid hormone metabolite, works as a pro-oxidant in brown adipocytes. ETA 2021

Laurino A, Gencarelli M, Landucci E, De Siena G, Cinci L, Bellusci L, Chiellini G, Raimondi L 3-iodothyroacetic acid is endowed of antidepressant effect depending on brain histamine release SIF 2019

Laurino A. 3-iodothyronamine (T1AM) and 3-iodothyroacetic acid (TA1): a novel signaling pathway connecting thyroid with the histaminergic system Neuroscience GM 2019 (invited)

Silvestri L., Laurino A., Mazzamuto G. (2018) Human Brain optical imaging, HBP SP2 2018

Laurino A, Raimondi L (2016) A novel signaling pathway connecting thyroid hormone derivatives with the histaminergic system, EHRS 2016 (invited)