



Francesco Resta

Date of birth: 08/07/1985 | **Nationality:** Italian | (+39) 3283525988 |

francesco.t.resta@gmail.com | via di careggi, 50019, Sesto Fiorentino (FI), Italy

● WORK EXPERIENCE

01/07/2018 – CURRENT – Florence, Italy

POSTDOCTORAL RESEARCHER – LENS EUROPEAN LABORATORY FOR NONLINEAR SPECTROSCOPY, UNIVERSITY OF FLORENCE

Main subject covered: application of advanced optical imaging and optogenetics techniques to study cortical physiology in different brain states

07/11/2016 – 06/07/2018 – Florence, Italy

TECHNOLOGIST – LENS EUROPEAN LABORATORY FOR NONLINEAR SPECTROSCOPY, UNIVERSITY OF FLORENCE

Main subject covered: functional cortical imaging in different brain states

01/12/2015 – 06/11/2016 – Florence, Italy

POSTDOCTORAL RESEARCHER – DEPARTMENT OF NEUROSCIENCES, PSYCHOLOGY, DRUG RESEARCH AND CHILD HEALTH, UNIVERSITY OF FLORENCE

Main subject covered: HCN channels related Channelopathies

01/12/2012 – 30/11/2015 – Florence, Italy

PHD IN PHARMACOLOGY AND INNOVATIVE TREATMENTS – DEPARTMENT OF NEUROSCIENCES, PSYCHOLOGY, DRUG RESEARCH AND CHILD HEALTH, UNIVERSITY OF FLORENCE

Main subject covered: Role of the HCN channels in neuropathic pain

02/01/2012 – 30/09/2012 – Pomezia, Italy

PREDOCTORAL FELLOW – DRUGS MINERALS AND GENERICS

Company granted fellowship to study the pharmacokinetics and pharmacodynamics of glycyrrhetic acid

● EDUCATION AND TRAINING

2012 – 2015 – Florence, Italy

PHD IN PHARMACOLOGY AND INNOVATIVE TREATMENTS – University of Florence

Address Florence, Italy

05/03/2010 – 05/09/2010 – Turin, Italy

VISITING STUDENT – Molecular Biotechnology Center, Torino (Italy)

Address Turin, Italy

2009 – 2011 – Florence, Italy

MASTER DEGREE IN CELLULAR AND MOLECULAR BIOLOGY 110/110 CUM LAUDE – University of Florence

Address Florence, Italy

2004 – 2008 – Florence, Italy

BACHELOR DEGREE IN BIOLOGY (110/110) – Department of histology and anatomy, University of Florence,

Address Florence, Italy

● **SCIENTIFIC PUBLICATIONS**

Bibliometric indicators

08/09/2022

hindex (scopus): 12

Total citations (scopus): 373

Large-scale all-optical dissection of motor cortex connectivity reveals a segregated organization of mouse forelimb representations

Francesco Resta, Elena Montagni, Giuseppe de Vito, Alessandro Scaglione, Anna Letizia Allegra Mascarò, Francesco Saverio Pavone. (in press) Large-scale all-optical dissection of motor cortex connectivity reveals a segregated organization of mouse forelimb representations. Cell Reports.

Power-effective scanning with AODs for 3D optogenetic applications

Pietro Ricci, Marco Marchetti, Michele Sorelli, Lapo Turrini, Francesco Resta, Vladislav Gavryusev, Giuseppe de Vito, Giuseppe Sancataldo, Francesco Vanzi, Ludovico Silvestri, Francesco Saverio Pavone (2022) Power-effective scanning with AODs for 3D optogenetic applications. Journal of Biophotonics (doi: 10.1002/jbio.202100256).

Ethanol neurotoxicity is mediated by changes in expression, surface localization and functional properties of glutamate AMPA receptors

Gerace, E., Ilari, A., Caffino, L., Buonvicino, D., Lana, D., Ugolini, F., Resta, F., Nosi, D., Grazia Giovannini, M., Ciccocioppo, R. and Fumagalli, F. (2021) Ethanol neurotoxicity is mediated by changes in expression, surface localization and functional properties of glutamate AMPA receptors. Journal of Neurochemistry (doi: 10.1111/jnc.15223)

Experimental and computational study on motor control and recovery after stroke: toward a constructive loop between experimental and virtual embodied neuroscience

Anna Letizia Allegra Mascarò, Egidio Falotico, Spase Petkoski, Maria Pasquini, Lorenzo Vannucci, Núria Tort-Colet, Emilia Conti, Francesco Resta, Cristina Spalletti, Shravan Tata Ramalingasetty, Axel von Arnim, Emanuele Formento, Emmanouil Angelidis, Camilla H Blixhavn, Trygve B Leergaard, Matteo Caleo, Alain Destexhe, Auke Ijspeert, Silvestro Micera, Cecilia Laschi, Viktor Jirsa, Marc-Oliver Gewaltig, Francesco S Pavone (2020) Experimental and computational study on motor control and recovery after stroke: toward a

constructive loop between experimental and virtual embodied neuroscience. *Frontiers in systems neuroscience* (doi: 10.3389/fnsys.2020.00031)

Analysis and Model of Cortical Slow Waves Acquired with Optical Techniques

Celotto, Marco, Chiara De Luca, Paolo Muratore, Francesco Resta, Anna L. Allegra Mascaro, Francesco S. Pavone, Giulia De Bonis, and Pier S. Paolucci (2020) Analysis and Model of Cortical Slow Waves Acquired with Optical Techniques. *Methods and Protocols* (doi: 10.3390/mps3010014).

Widefield imaging of cortical neuronal activity with redshifted functional indicators during motor task execution

Elena Montagni, Francesco Resta, Emilia Conti, Alessandro Scaglione, Maria Pasquini, Silvestro Micera, Anna Letizia Allegra Mascaro, Francesco Saverio Pavone (2018) Widefield imaging of cortical neuronal activity with redshifted functional indicators during motor task execution. *Journal of Physics D: Applied Physics* (doi: 10.1088/13616463/aaf26c)

Optogenetics in brain research: from a strategy to investigate physiological function to a therapeutic tool

Elena Montagni, Francesco Resta, Anna Letizia Allegra Mascaro, Francesco Saverio Pavone (2019) Optogenetics in brain research: from a strategy to investigate physiological function to a therapeutic tool. *Photonics* (doi: 10.3390/photonics6030092)

Selective Blockade of HCN1/HCN2 Channels as a Potential Pharmacological Strategy Against Pain

Leonardo Dini, Martina Del Lungo, Francesco Resta, Michele Melchiorre, Valentina Spinelli, Lorenzo Di Cesare Mannelli, Carla Ghelardini, Annunziata Laurino, Laura Sartiani, Raffaele Coppini, Guido Mannaioni, Elisabetta Cerbai and Maria Novella Romanelli (2018) Selective Blockade of HCN1/HCN2 Channels as a Potential Pharmacological Strategy Against Pain. *Frontiers in Pharmacology*, 9 (NOV), art. no. 1252 (10.3389/fphar.2018.01252)

Anticonvulsant and Neuroprotective Effects of the Thyroid Hormone Metabolite 3 Iodothyroacetic Acid

Laurino A, Landucci E, Resta F, De Siena G, Pellegrini Giampietro DE, Masi A, Mannaioni G, Raimondi L (2018) Anticonvulsant and Neuroprotective Effects of the Thyroid Hormone Metabolite 3 Iodothyroacetic Acid. *Thyroid* (10.1089/thy.2017.0506)

3Iodothyroacetic acid (TA1), a byproduct of thyroid hormone metabolism, reduces the hypnotic effect of ethanol without interacting at GABAA receptors

Annunziata Laurino, Elisa Landucci, Francesco Resta, Gaetano De Siena, Rosanna Matucci, Alessio Masi, Laura Raimondi (2017) 3Iodothyroacetic acid (TA1), a byproduct of thyroid hormone metabolism, reduces the hypnotic effect of ethanol without interacting at GABAA receptors. *Neurochemistry international* (10.1016/j.neuint.2017.10.008)

Identification of the Nicotinamide Salvage Pathway as a New Toxication Route for Antimetabolites Cell chemical biology

Daniela Buonvicino, Francesca Mazzola, Federica Zamporlini, Francesco Resta, Giuseppe Ranieri, Emidio Camaioni, Mirko Muzzi, Riccardo Zecchi, Giuseppe Pieraccini, Christian Dölle, Massimo Calamante, Gianluca Bartolucci, Mathias Ziegler, Barbara Stecca, Nadia Raffaelli, Alberto Chiarugi (2018) Identification of the Nicotinamide Salvage Pathway as a New Toxication Route for Antimetabolites *Cell chemical biology* (doi: 10.1016/j.chembiol.2018.01.012)

Selective HCN1 block as a strategy to control oxaliplatin-induced neuropathy

F Resta, L Micheli, A Laurino, V Spinelli, T Mello, L Sartiani, L Di Cesare Mannelli, E Cerbai, C Ghelardini, MN Romanelli, G Mannaioni, A Masi (2018) Selective HCN1 block as a strategy to control oxaliplatin-induced neuropathy. *Neuropharmacology* (10.1016/j.neuropharm.2018.01.014)

Dexpramipexole improves bioenergetics and outcome in experimental stroke

Muzzi M, Gerace E, Buonvicino D, Coppi E, Resta F, Formentini L, Zecchi R, Tigli L, Guasti D, Ferri M, Camaioni E, Masi A, Pellegrini-Giampietro DE, Mannaioni G, Bani D, Pugliese AM, Chiarugi A. (2018) Dexpramipexole improves bioenergetics and outcome in experimental stroke. *British Journal Pharmacology* (doi: 10.1111/bph.13790)

The gliadin peptide 3143 exacerbates kainate neurotoxicity in epilepsy models

Elisabetta Gerace, Francesco Resta, Elisa Landucci, Daniela Renzi, Alessio Masi, Domenico E Pellegrini-Giampietro, Antonio Calabrò, Guido Mannaioni (2017) The gliadin peptide 3143 exacerbates kainate neurotoxicity in epilepsy models. *Scientific Reports* (doi:10.1038/s41598017-14845-4)

Optical mapping of neuronal activity during seizures in zebrafish

L. Turrini, C. Fornetto, G. Marchetto, M. C. Müllenbroich, N. Tiso, A. Vettori, F. Resta, A. Masi, G. Mannaioni, F. S. Pavone & F. Vanzi (2017) Optical mapping of neuronal activity during seizures in zebrafish. *Scientific reports* (doi:10.1038/s4159801703087z)

Kynurenic acid and zaprinast induce analgesia by modulating HCN channels through GPR35 activation

Resta F, Masi A, Sili M, Laurino A, Moroni F, Mannaioni G. (2016) Kynurenic acid and zaprinast induce analgesia by modulating HCN channels through GPR35 activation. *Neuropharmacology* (doi: 10.1016/j.neuropharm.2016.04.038).

Differential contribution of Ih to the integration of excitatory synaptic inputs in Substantia Nigra pars compacta and Ventral Tegmental Area dopaminergic neurons

Masi A, Narducci R, Resta F, Carbone C, Kobayashi K, Mannaioni G. (2015) Differential contribution of Ih to the integration of excitatory synaptic inputs in Substantia Nigra pars compacta and Ventral Tegmental Area dopaminergic neurons. *European Journal of Neuroscience* (doi: 10.1111/ejn.13066).

3iodothyroacetic acid, a metabolite of thyroid hormone, induces itch and reduces threshold to noxious and to painful heat stimuli in mice

Laurino A, De Siena G, Resta F, Masi A, Musilli C, Zucchi R, Raimondi L. (2015) 3iodothyroacetic acid, a metabolite of thyroid hormone, induces itch and reduces threshold to noxious and to painful heat stimuli in mice. *British Journal of Pharmacology* (doi: 10.1111/bph.13032)

CoQ10 containing eye drops prevent UVB induced cornea cell damage and increase cornea wound healing by preserving mitochondrial function

Mencucci R, Favuzza E, Bocalini C, Lapucci A, Felici R, Resta F, Chiarugi A, And Cavone L. (2014) CoQ10-containing eye drops prevent UVB-induced cornea cell damage and increase cornea wound healing by preserving mitochondrial function. *Investigative ophthalmology & visual science* (doi: 10.1167/iovs.1415306).

PARP1 activation causes neuronal death in the hippocampal CA1 region by increasing the expression of Ca²⁺-permeable AMPA receptors

Gerace E, Masi A, Resta F, Felici R, Landucci E, Mello T, Pellegrini Giampietro DE, Mannaioni G, Moroni F. (2014) PARP1 activation causes neuronal death in the hippocampal CA1 region by increasing the expression of Ca²⁺-permeable AMPA receptors. *Neurobiology of Disease* (doi: 10.1016/j.nbd.2014.05.023).

● OTHER SCIENTIFIC PRODUCTION

Proceedings (2020 - present)

1. Francesco Resta, Giacomo Mazzamuto, Emilia Conti, Anna Letizia Allegra Mascaro, and Francesco Saverio Pavone "All-optical perturbational approach to study information integration among distributed cortical regions", *Proc. SPIE PC12144, Biomedical Spectroscopy, Microscopy, and Imaging II*, PC1214405 (2022)
2. Pietro Ricci, Marco Marchetti, Michele Sorelli, Lapo Turrini, Francesco Resta, Vladislav Gavryusev, Giuseppe de Vito, Giuseppe Sancataldo, Francesco Vanzi, Ludovico Silvestri, and Francesco Pavone "An AOD breakthrough for volumetric 2P optogenetic applications", *Proc. SPIE PC12144, Biomedical Spectroscopy, Microscopy, and Imaging II*, PC1214406 (2022)
3. Montagni, Elena; Resta, Francesco; de Vito, Giuseppe; Scaglione, Alessandro; Mascaro, Anna Letizia Allegra; Pavone, Francesco Saverio. Movement-specific patterns of cortical activation revealed by in vivo all-optical imaging and manipulation of neuronal activity in the motor cortex. *Neurophotonics*, 11360 1136007 2020 SPIE
4. Resta, Francesco; Mascaro, Anna Letizia Allegra; Montagni, Elena; de Vito, Giuseppe; Scaglione, Alessandro; Pavone, Francesco Saverio. Mesoscale imaging of neuronal activity coupled with light-evoked motor mapping reveal movement-specific spatiotemporal patterns of cortical activation in awake mice *Neural Imaging and Sensing 2020* 11226 31-34 2020 SPIE
5. De Bonis, Giulia; Camassa, Alessandra; Pavone, Francesco Saverio; Storm, Johan Frederik; Resta, Francesco; Gutzen, Robin; Sanchez-Vives, Maria V; Arena, Alessandro; Pastorelli, Elena; Nieuwenhuis, Thierry. Multi-scale, multi-species, multi-methodology experiments, analysis tools and simulation models of Brain States and Complexity in SP3-UseCase002. *2020 Computational and Systems Neuroscience*
6. Gutzen, Robin; Mattheisen, Glynis; Pavone, Francesco Saverio; Mattia, Maurizio; Resta, Francesco; Sanchez-Vives, Maria V; Pastorelli, Elena; Paolucci, Pier Stanislao; Allegra Mascaro, Anna Letizia; De Bonis, Giulia. Building adaptable and reusable pipelines for investigating the features of slow cortical rhythms across scales, methods, and species. *Bernstein Conference FZJ-2020-03960 2020 Computational and Systems Neuroscience*

Proceedings (2018 - 2019)

1. Resta, Francesco; Montagni, Elena; De Vito, Giuseppe; Scaglione, Alessandro; Mascaro, Anna Letizia Allegra; Pavone, Francesco Saverio. Full-optical stimulation and readout of neuronal activity during optogenetically-evoked movements in awake mice. *European Conference on Biomedical Optics*. 11076 9 2019 Optical Society of America
2. Resta, Francesco; Montagni, Elena; Conti, Emilia; de Vito, Giuseppe; Mascaro, Anna Letizia Allegra; Pavone, Francesco Saverio. All-optical readout and stimulation of cortical activity during optogenetically-triggered motor task in awake mice. *Neural Imaging and Sensing 2019* 10865 108650Y 2019 SPIE
3. Conti, Emilia; Mascaro, Anna Letizia Allegra; Resta, Francesco; Scaglione, Alessandro; Pasquini, Maria; Micera, Silvestro; Pavone, Francesco S. Combined rehabilitation promotes recovery of motor functionality in a mouse model of stroke. *Neural Imaging and Sensing 2019* 10865 55-59 2019 SPIE
4. Resta, Francesco; Montagni, Elena; Conti, Emilia; de Vito, Giuseppe; Mascaro, Anna Letizia Allegra; Pavone, Francesco Saverio. All-optical readout and stimulation of cortical activity during optogenetically-triggered motor task in awake mice. *Neural Imaging and Sensing 2019* 10865 108650Y 2019 SPIE
5. Conti, Emilia; Mascaro, Anna Letizia Allegra; Resta, Francesco; Scaglione, Alessandro; Pasquini, Maria; Micera, Silvestro; Pavone, Francesco S. Combined rehabilitation promotes recovery of motor functionality in a mouse model of stroke. *Neural Imaging and Sensing 2019* 10865 55-59 2019 SPIE
6. Montagni, Elena; Resta, Francesco; Conti, Emilia; Pasquini, Maria; Mascaro, Anna Letizia Allegra; Pavone, Francesco S. Imaging of cortical neuronal-activity with red-shifted functional indicators during motor task execution. *2018 IET Digital Library*

Datasets published in repositories

1. Wide-field calcium imaging of the right cortical hemisphere of GCaMP6f mice at different anesthesia levels - doi:10.25493/XJR8-QCA
2. Simultaneous cortical fluorescence imaging and LFP recording in striatum after optogenetic striatal stimulation - doi:10.25493/NK4R-2RE
3. Two-photon calcium imaging of cortical layer 2/3 neurons in GCaMP6f mice at different anesthesia levels - doi:10.25493/R7J6-S69
4. Wide-field calcium imaging of distributed cortical activation elicited by electrical stimulation of Deep Cerebellar Nuclei - doi:10.25493/JBV5-S9N
5. Wide-field calcium imaging of the right cortical hemisphere of GCaMP6f mice at different anesthesia levels - doi:10.25493/XJR8-QCA
6. Wide-field imaging of cortical response to sensory stimulation in GCaMP6f mice at different brain states - doi:10.25493/2GDR-AKY

Preprints

1. Capone, Cristiano; De Luca, Chiara; De Bonis, Giulia; Pastorelli, Elena; Mascaro, Anna Letizia Allegra; Resta, Francesco; Pavone, Francesco; Paolucci, Pier Stanislao; "Simulations Approaching Data: Cortical Slow Waves in Inferred Models of the Whole Hemisphere of Mouse. arXiv preprint:2104.07445
2. Resta, Francesco; Montagni, Elena; de Vito, Giuseppe; Scaglione, Alessandro; Mascaro, Anna Letizia Allegra; Pavone, Francesco Saverio. Large-scale all-optical dissection of motor cortex connectivity reveals a segregated functional organization of mouse forelimb representations. bioRxiv 2021. Cold Spring Harbor Laboratory

● HONOR AND AWARDS

Italian Society of Pharmacology

Best oral communication awards.

Advances in pain research: pathophysiology and new therapeutic strategies. 19/06/2015 Naples, Italy

Italian Society of Neuroscience

Travel grant.

XVI Congress of the Italian Society of Neuroscience. 08/10/2015 Cagliari, Italy.

Human Brain Project

Travel grant

Brain Activity across Scales and Species: Analysis of Experiments and Simulations (BASSES). EBRAINS Workshop 13–15 June 2022 | Rome & virtual

● GRANTED PROJECT MEMBER

European Union's Horizon 2020 research and innovation Framework Programme under grant agreements N. 945539 (HBP-SGA3), N. 785907 (HBP-SGA2),

EU program H2020 EXCELLENT SCIENCE - European Research Council (ERC) under grant agreement n. 692943 (BrainBIT)

Bank Foundation Fondazione Cassa di Risparmio di Firenze grant "Human Brain Optical Mapping"

● SEMINARS CONTRIBUTIONS

Oral communications (invited)

1. "State-dependent cortex-wide broadcasting of sensory information" EBRAINS, BASSES Workshop, 2022, Rome, Italy
2. "Isoform-selective HCN channels blocker to control Chemotherapy-Induced Peripheral Neuropathy" InnovationFlow Farindustria, 2016, Roma, Italy

Oral communications (selected)

1. "All-optical perturbational approach to study information integration among distributed cortical regions" SPIE, Photonics Europe, 2022, Strasbourg, France
2. "Mesoscale imaging of neuronal activity coupled with light-evoked motor mapping reveals movement-specific spatiotemporal patterns of cortical activation in awake mice" SPIE, Photonics West, 2020 San Francisco, USA
3. "Alloptical readout and stimulation of cortical activity during optogenetically triggered motor task in awake mice" SPIE, Photonics West, 2019 San Francisco, USA
4. "Simultaneous alloptical stimulation and readout of cortical activity during optogenetically evoked motor task" Society For Neuroscience, Neuroscience, 2018 San Diego, USA
5. "In vivo imaging and simulation of small network calcium activity under different anesthesia levels in mice" Brain states: Models and Experiments, 2018 EITN Paris France
6. "Rodent models of stroke (cortical vs. subcortical)" HBP NET-STIM STROKE, 2018 Venetian Institute of Molecular Biology, Padova, Italy
7. "Small network calcium activity mirrors large scale cortical waves under deep anesthesia: an SP1/CDP1 study for validation of SP4 brain models" – Young Investigators Update, 5th Annual Human Brain Project Summit, 2017, Glasgow, Scotland
8. "Hyperpolarization-activated cyclic nucleotide gated channels as a promising new target for pain treatment" Italian Society of Neuroscience, 2015, Cagliari, Italy
9. "Hyperpolarization-activated cyclic nucleotide gated (HCN) channels role in chemotherapy-induced neuropathy" Advances in pain research: Pathophysiology and new therapeutic strategies, Italian Society of Pharmacology, 2015, Napoli, Italy

Posters (selected)

1. Francesco Resta, Elena Montagni, Giuseppe De Vito, Alessandro Scaglione, Anna Letizia Allegra Mascaro and Francesco Saverio Pavone. Wide-field imaging of neuronal activity coupled with optogenetic-evoked motor mapping reveals movement-specific patterns of cortical activation in awake mice. 6th International Workshop on Technologies for Optogenetics and Neurophotonics - OPTOGEN2019, Venice, Italy
2. Francesco Resta, Emilia Conti, Elena Montagni, Leonardo Sacconi, Anna Letizia Allegra Mascaro, Francesco Saverio Pavone. Alloptical Simultaneous Stimulation and Readout of Motor Cortex Activity in Awake Mice. Biophotonics Congress, Biomedical Optics Congress 2018 2.
3. Resto Francesco, Micheli Laura, Masi Alessio, Mello Tommaso, Ricci Gemma and Mannaioni Guido. Hyperpolarization-activated cyclic nucleotide gated (hcn) channels modulate

oxaliplatininduced neuropathy. Italian Society of Pharmacology, the pharmacological basis of novel pain therapeutics 2017

4. F. Resta, L. Micheli, L. Di Cesare Mannelli, A. Masi, C. Ghelardini, G. Mannaioni. Hyperpolarizationactivated Cyclic Nucleotide Gated (HCN) channels drive oxaliplatininduced neuropathy. FENS forum 2016 (D051)
5. Resta F, Masi A, Sili M, Laurino A, Moroni F, Mannaioni G. GPR35 agonists mediate analgesic effects through the modulation of hyperpolarizationactivated cyclic nucleotide gated channels. PhD National meeting of the Italian Society of Neuroscience 2015 (P20)
6. F Resta, E Gerace, A Masi, R Felici, E Landucci, T Mello, DE PellegriniGiampietro, G Mannaioni & F Moroni. Parp1 activation causes CA1 pyramidal cell death in organotypic hippocampal slice cultures. FENS Forum 2014 (C106)
7. Resta F., Gerace E., Landucci E., Renzi D., Calabrò A., PellegriniGiampietro D.E. & Mannaioni G. Neurological disorders in celiac disease: study of the pathogenetic mechanisms in an in vitro model of epilepsy. Italian Society of Neuroscience, XV National Congress 2013 (P01.128)

● **OTHER SCIENTIFIC COMMITMENTS**

Member of the EC FET flagship Human Brain Project

member of the Society for Neuroscience. Contact Number: 210800052

Reviewer activity

Scientific Reports, Drug Design, Development and Therapy, Letters in Drug Design & Discovery, French National Research Agency (ANR), Pharmacological Research journal, Journal of Affective Disorders.

Laboratory animals care and use certificate

Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna
ELEMENTI BASE PER L'APPROCCIO DEI RICERCATORI
ALL'UTILIZZO DEGLI ANIMALI AI FINI SCIENTIFICI Formazione 2021

● **TEACHING EXPERIENCE**

Student supervisor experience

1. PhD student: Elena Montagni. all-optical functional mapping of the forelimb motor cortex reveals two distinct grasping cortical representations. Academic Discipline (SSD) FIS/03. (2020) European Laboratory for Non-Linear Spectroscopy, Florence, Italy
2. Undergraduate student: Gemma Ricci. HCN1 selective block as a strategy to control Chemotherapy-Induced Peripheral Neuropathy (2016) University of Florence, Florence, Italy

Lessons

1. "Optogenetics" (2018) Biophotonics PhD program, LENS - European Laboratory for Non-Linear Spectroscopy, Florence Italy
2. "Rehabilitation induced cortical plasticity after stroke" (2017) 5th HBP SCHOOL - FUTURE MEDICINE, Obergurgl University Center, Austria

● **PUBLIC ENGAGEMENT AND DISSEMINATION IN THE NON-SCIENTIFIC COMMUNITY**

Open and interactive public lesson: Scienzaestate

Title: Dal genio di Leonardo allo sbarco sulla luna: le scoperte scientifiche e tecnologiche nel progresso dell'umanità

Section: Detto, fatto! Come la mente trasforma i pensieri in movimento (2019)

Open and interactive public lesson: Scienzaestate

"Gli altri siamo noi" (2018) open public lesson on mirror neurons, OpenLab Firenze dei Bambini 2018, Florence Italy

● **SOCIAL AND POLITICAL ACTIVITIES**

Gender Equality Plan Commitee

European Laboratory for Non-Linear Spectroscopy (LENS)
Gender equality plan: Representative of research grants and PHD students

PhD Student representative in the Department Council

University of Florence - NEUROFARBA department

2005 - 2009

Student representative in the Degree Course Council

University of Florence - Faculty of Science