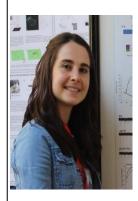
# Curriculum Vitæ

# FORMATO EUROPEO PER IL CURRICULUM VITAE





#### PERSONAL INFORMATION

Surname and name

E-mail address

Italian

Date of birth

Nationality

June 4th, 1997

TRUCCO ARIANNA

#### **WORK EXPERIENCE**

## **ACTUAL POSITION**

• Time period (from – to)

· Name and address of the Principal Investigator 1-10-2023 - nowaday

Prof. Gerardo Biella - Dr. Paolo Spaiardi

arianna.trucco01@universitadipavia.it

Electrophysiology and Biophysics of Ion Channels Lab Department of Biology and Biotechnology "L. Spallanzani" University of Pavia: 6, Via Forlanini, Pavia, 27100, Italy

Position

PhD student

## **PAST EXPERIENCES**

• Time period (from – to)

· Name and address of the Principal Investigator 15-05-2023 - 30-9-2023

Prof. Gerardo Biella - Prof. Paolo Walter Cattaneo

Electrophysiology and Biophysics of Ion Channels Lab – National Institute for Nuclear Physics (INFN)

Department of Biology and Biotechnology "L. Spallanzani" - Department of Physics

University of Pavia: 6, Via Forlanini, Pavia, 27100, Italy - 6, Via Agostino Bassi, Pavia, 27100,

• Reserch field

skills acquired

SPEye project (development of an innovative subretinal prosthesis consisting of a silicon photomultiplier - SiPM)

 Position Awarding of a thematic scholarship for recently graduated student by INFN (Pavia) · Principal subjects covered, and

Evaluation of the SiPM electric field

SiPM biocompatibility: setting of electrophysiological recordings on SHSY5Y cells, which undergo protocols to express a neuron-like phenotype

Bibliographic research to planning an experimental cycle, focusing the attention on optogenetics and calcium-imaging experiments

• Time period (from – to)

Pagina 1 - Curriculum vitae di [Trucco, Arianna] 27-01-2023 - 14-05-2023

Per ulteriori informazioni: www.cedefop.eu.int/transparency www.europa.eu.int/comm/education/index\_it.html www.eurescv-search.com

 Name and address of the Principal Investigator Prof. Gerardo Biella

Electrophysiology and Biophysics of Ion Channels Lab

Department of Biology and Biotechnology "L. Spallanzani" University of Pavia: 6, Via Forlanini, Pavia, 27100, Italy

 Research field Neurophysiology and Biophysics of Ion Channels

Position

Volunteer attendant before PhD

• Principal subjects covered, and skills acquired Whole-cell patch clamp electrophysiological recordings on brain slices

Experimental data analysis

Immunofluorescence techniques

Bibliographic research to planning an experimental cycle

• Time period (from – to)

01-10-2020 - 26-01-2023

• Name and address of the Principal Investigator Prof. Gerardo Biella

Electrophysiology and Biophysics of Ion Channels Lab Department of Biology and Biotechnology "L. Spallanzani"

University of Pavia: 6, Via Forlanini, Pavia, 27100, Italy

Research field

Neurophysiology and Biophysics of Ion Channels

Position

Internship for Master thesis

· Principal subjects covered, and skills acquired Whole-cell patch clamp electrophysiological recordings on brain slices

Experimental data analysis

Immunofluorescence techniques

Bibliographic research to planning an experimental cycle, focusing the attention on the identification of striatal markers and their primers and the setting of patch-seq. experiments

• Time period (from – to)

01-01-2019 - 28-11-2019

· Name and address of the Principal Investigator Prof.ssa Maurizia Dossena Pharmacobiochemistry Lab

Department of Biology and Biotechnology "L. Spallanzani" University of Pavia: 9, Via Ferrata, Pavia, 27100, Italy

Research field

Colorectal Cancer, Alzheimer's disease, Nervous Anorexia: amino acids dosages

Position

Internship for Bachelor thesis

Laboratory basic activities

 Principal subjects covered, and skills acquired

Processing of blood and cerebrospinal fluid samples derived from patients

# **EDUCATION AND TRAINING**

Year of graduation

2023

 Name and locality of the educational or training organization University of Pavia: 65, Corso Strada Nuova, Pavia, 27100, Italy

Thesis title

Functional alterations of striatal cells' different populations in a mouse model of Huntington's disease: early and late stages comparison

• Degree grade

110/110 with honour

· Qualification awarded

Master's degree in Neurobiology

Level in national classification

EQF 7

Year of graduation

2019

· Name and locality of the educational or training organization University of Pavia: 65, Corso Strada Nuova, Pavia, 27100, Italy

· Thesis title

Cancer patients being treated with XELOX: plasma dosages of malonyldialdehyde and amino acids

Degree grade

109/110

Qualification awarded

Bachelor's degree in Biological Sciences

· Level in national classification

EQF 6

Pagina 2 - Curriculum vitae di [Trucco, Arianna]

Per ulteriori informazioni: www.cedefop.eu.int/transparency www.europa.eu.int/comm/education/index\_it.html www.eurescv-search.com

Year of graduation

· Name and locality of the educational or training organization

High school "G.D. Cassini": 53, Corso Cavallotti, Sanremo, 18038, Italy

• Degree grade

2016

· Qualification awarded

Classical high school diploma

· Level in national classification

EQF 4

# LINGUISTIC SKILLS AND **COMPETENCES**

NATIVE LANGUAGE

**I**TALIAN

OTHER LANGUAGES

ENGLISH [(CERTIFICATE TRINITY GRADE 6; STUDY HOLIDAY IN 2015 AT THE DRAMA STUDIO IN LONDON]

· Understanding (listening and reading) INDEPENDENT USER

Writing

INDEPENDENT USER

Speaking

INDEPENDENT USER

FRENCH (CERTIFICATE DELF GRADE A2)

· Understanding (listening and reading) BASIC USER

Writing

BASIC USER

Speaking

**BASIC USER** 

### SOCIAL AND PLANNING SKILLS

GOOD PREDISPOSITION TO WORK IN TEAM AND TO SETUP COLLABORATIONS

ABILITY TO SPEAK IN PUBLIC PRESENTING SCIENTIFIC ARTICLES AND RESULTS FROM EXPERIMENTAL **ACTIVITY** 

ORGANIZATION AND PROBLEM-SOLVING SKILLS DERIVED FROM THE EXPERIMENTAL PLANNING

# JOB-RELATED SKILLS AND **COMPETENCES**

GOOD COMMAND OF THE INTRACARDIAC PERFUSION PROCEDURE AND MURINE BRAIN DISSECTION

GOOD KNOWLEDGE OF WHOLE-CELL PATCH CLAMP TECHNIQUE ON MURINE BRAIN SLICES AND BASIC ONE ON CELL CULTURES: NEURONS ELECTRICAL ACTIVITY REGISTRATION BOTH BEFORE AND AFTER THE APPLICATION OF A DRUG/TOXIN INTO THE BATH; HELP IN SETTING EX-VIVO LTP INDUCTION

GOOD KNOWLEDGE OF IMMUNOFLUORESCENCE PROTOCOL ON BRAIN SLICES

GOOD ABILITY IN ISOLATING HIPPOCAMPAL AREAS AND STRIATUM FROM MURINE BRAIN SLICES

GOOD KNOWLEDGE OF THE GENOTYPING PROTOCOL: DNA EXTRACTION FROM MURINE TISSUE (TAIL OR FINGER), POLYMERASE CHAIN REACTION (PCR), AGAROSE ELECTROPHORESIS GEL

GOOD ABILITY IN MOUSE MANIPULATION IN ANIMAL FACILITY AND MOUSE COLONY ADMINISTRATION

# INFORMATIC SKILLS AND **COMPETENCES**

## **CERTIFICATE ECDL CORE FULL**

GOOD KNOWLEDGE OF WINDOWS AND MACOS

GOOD KNOWLEDGE OF MICROSOFT OFFICE PACKAGE (WORD, EXCEL, POWERPOINT)

GOOD KNOWLEDGE OF PCLAMP DATA ACQUISITION AND ANALYSIS PACKAGE (CLAMPEX AND CLAPFIT)

Pagina 3 - Curriculum vitae di [Trucco, Arianna]

Per ulteriori informazioni: www.cedefop.eu.int/transparency www.europa.eu.int/comm/education/index\_it.html www.eurescv-search.com

GOOD KNOWLEDGE OF *MICROCAL ORIGIN*BASIC KNOWLEDGE OF *IMAGEJ*DATA ANALYSIS USING HOMEMADE SCRIPT IN *LABVIEW*GOOD KNOWLEDGE OF THE *ENTREZ-PUBMED DATABASE* 

# **DIDACTIC ACTIVITY**

Preparation and discussion of seven didactic seminars for the course "Comparative Anatomy" of the Bachelor's degree in Science and Technology for Nature and Biological Sciences at University of Pavia (November, 2019). Principal Investigator: <a href="Prof. Vittorio Bertone">Prof. Vittorio Bertone</a>.

Preparation and discussion of a didactic seminar about excitatory post-synaptic currents analysis through a *LabVIEW* script for the course "Cellular neurophysiology" of the Master's degree in Neurobiology at University of Pavia (2022 - 2024). Principal Investigator: <u>Prof. Gerardo Biella</u> and <u>Dr. Francesca Talpo</u>.

# CONFERENCES AND SEMINARS ATTENDED

## CERTIFICATES FOR ANIMAL MANIPULATION THEORY AND PRACTICE:

"Minisimposi sulla sperimentazione animale in biomedicina: un percorso di scienza, storia, diritto, etica e medicina" (online: March 18<sup>th</sup>, 2021; June 9<sup>th</sup>, 202; June 21<sup>st</sup>, 2021; September 23<sup>rd</sup>, 2021; October 29<sup>th</sup>; 2021)

Teramo IZS "Recognition of pain, suffering and distress and its application in the evaluation of severity of the procedures (species specific: mice and rats) – III Edition" (online: November 2023)

IZSLER "Biologia e gestione degli animali da laboratorio, moduli 3.1, 4, 5, 6.1, 7. DM 5 agosto 2021 roditori e lagomorfi – 1^ Edizione" (online: November, 2023)

IZSLER "Legislazione nazionale ed etica livello 1, moduli 1 e 2, DM 5 agosto 2021 – 1<sup>^</sup> Edizione" (online: November, 2023)

IZSLER "Etica e concezione dei progetti, moduli 9,10, 11, DM 5 agosto 2021 – Edizione Unica" (online: November,2023)

"Percorso formativo per funzione A. Moduli 3.2 Biologia di Base – 6.2 Eutanasia – 8 Procedure minimamente invasive senza anestesia. Specie topo e ratto. 12 CFP" (Charles River, Calco, Italy, December 4th-5th, 2023)

### ANALYSIS:

Mario A. Comelli "Statistical models useful in biomedical and behavioural research – a "hands on" approach exploiting the package R" (Pavia, September 25th-29th, 2023)

#### **OTHERS**

Giacomo Rizzolatti "Specchi nel cervello: basi neurali dell'empatia" (Cairoli college, Pavia, December 3<sup>rd</sup>, 2019)

Elena Cattaneo "Staminali e trascrittomica *single-cell* per le malattie neurodegenerative" (online: February 4<sup>th</sup>, 2021)

Symposium in honour of Professor Jacopo Magistretti (Pavia, September 22<sup>nd</sup>, 2021)

Michael W. Young "Chronic social isolation signals starvation in the Drosophila brain and reduces sleep" (Pavia, April 7th, 2022)

"Next Generation Neurobiology Training: a new Era Begins at University of Pavia" (Pavia, September 22<sup>nd</sup>-23<sup>rd</sup>, 2022)

Edward Moser "Neural computation of space and time" (Pavia, March 1st, 2023)

Thomas C. Südhof "Towards a cell biology of Alzheimer's disease" (Pavia, May 26th, 2023)

Congresso FISV "Genomica: tecnologie avanzate" (Milan, January 25th-26th, 2024) FENS Forum 2024 (Vienna, June 25th-29th, 2024)

Fresco International Workshop on synaptic plasticity and advances in Parkinson's disease (Milazzo, September 19 th-21st, 2024)

## THESIS CO-SUPERVISOR

Co-supervisor of Bachelor's degree in Biological Sciences thesis "Electrophysiological characterization of striatal medium spiny neurons differentiated from human embryonic stem cells and engineered to express hM3Dq and KORD chemoreceptors". Candidate: Chiara Donati. Supervisor: Dr. Paolo Spaiardi.

Co-supervisor of Bachelor's degree in Biological Sciences thesis "Study of spontaneous excitatory postsynaptic currents of CA1 pyramidal neurons of mouse after the perfusion of IGF-II". Candidate: Maya Brusa. Supervisor: Prof. Gerardo Biella.

#### OTHER ACTIVITIES

Member of "Commissione Paritetica Docenti-Studenti" for the Master's degree in Neurobiology at University of Pavia (November 2020 - November 2022)

SHARPER (SHAring Researchers' Passion for Enhanced Roadmaps) – European Researchers' Night: presenter at the stand "MagicaMENTE!" (Pavia, September 2021, 2022, 2023)

SHARPER (SHAring Researchers' Passion for Enhanced Roadmaps) – European Researchers' Night: presenter at the stand "Neuropolis" (Pavia, September 2024)

Roundtable with the Nobel prize Edward Moser (Pavia, March 2<sup>nd</sup>, 2023)

# POSTER, ABSTRACTS AND ORAL PRESENTATIONS

Canevari C, <u>Trucco A</u>, Raffin F, Talpo F, Bisceglia D E, Ruto F, Salerno C, Valenza M, Biella G "Restoration of cortico-striatal connectivity in a mouse model of Huntington's disease through the administration of cholesterol-loaded nanoparticles". Presenter at the congress "Next Generation Neurobiology Training: a new Era Begins at University of Pavia" (<u>Pavia</u>, September 22<sup>nd</sup>-23<sup>rd</sup>, 2022)

Raffin F, De Luca R, <u>Trucco A</u>, Castagno A N, Spaiardi P, Talpo F, Fuller P M, Biella G, Arrigoni E "Neuropeptidergic modulation of the hypothalamic subparaventricular neurons in mouse brain slices". SFN 2023 (Washington DC, November 11th-15th, 2023)

Castagno A N, Spaiardi P, <u>Trucco A</u>, Maniezzi C, Raffin F, Mancini M, Nicois A, Cazzola J, Del Papa P, Pedrinazzi M, Pisani A, Talpo F, Biella G "Shaping the spikes: oxytocinergic modulation of action potentials in the CA1 hippocampal region of mice". SINS 2023 (<u>Turin, September 14<sup>th</sup>-17<sup>th</sup>, 2023</u>)

<u>Trucco A</u>, Spaiardi P, Castagno A N, Raffin F, Mancini M, Cazzola J, Faravelli G, Talpo F, Biella G "Functional impairments of striatal neurons in Huntington's disease: fast-spiking interneurons and their key role during the early stages of the pathology". FENS 2024 (Vienna, June 25 th-29th, 2024)

Castagno A N, Spaiardi P, <u>Trucco A</u>, Cazzola J, Raffin F, Mancini M, Nicois A, Cazzola J, Del Papa P, Pedrinazzi M, Pisani A, Talpo F, Biella G "Fast and (sometimes) furious: oxytocinergic modulation of fast-spiking interneurons in hippocampal CA1 region and caudoputamen of mice". FENS 2024 (<u>Vienna, June 25 th-29th, 2024</u>)

Cazzola J, Spaiardi P, Iannantuoni S, Donati C, Maramai S, Saletti M, Castagno A N, Faravelli G, Raffin F, <u>Trucco A</u>, Talpo F, Anzini M, Biella G "Physiological evaluation of a new riuzole-based compound as neuroprotective agent" FENS 2024 (Vienna, June 25 th-29th, 2024)

<u>Trucco A</u>, Spaiardi P, Castagno A N, Raffin F, Mancini M, Cazzola J, Faravelli G, Talpo F, Biella G "Different vulnerability of striatal neurons and functional impairments temporal onset in a preclinal model of Huntington's disease during the progression of the pathology". Fresco international workshop on synaptic plasticity and advances in Parkinson's disease (<u>Milazzo</u>, <u>September 19 th-21st</u>, <u>2024</u>), also <u>selected for an oral presentation</u>

## **PUBBLICATIONS IN EXTENSO**

Birolini G, Valenza M, Ottonelli I, Talpo F, Minoli L, Cappelleri A, Bombaci M, Caccia C, Canevari C, <u>Trucco A</u>, Leoni V, Passoni A, Favagrossa M, Nucera M R, Colombo L, Paltrinieri S, Bagnati R, Duskey J T, Caraffi R, Vandelli M A, Taroni F, Salmona M, Scanziani E, Biella G, Ruozi B, Tosi G, Cattaneo E. Chronic cholesterol administration to the brain supports complete and long-lasting cognitive and motor amelioration in Huntington's disease. Pharmacological Research. 2023.

Castagno A N, Spaiardi P, <u>Trucco A</u>, Maniezzi C, Raffin F, Mancini M, Nicois A, Cazzola J, Pedrinazzi M, Del Papa P, Pisani A, Talpo F, Biella G. **Oxytocin modifies the excitability and the action potential shape of the hippocampal CA1 GABAergic interneurons.** Int J Mol Sci. 2024.

#### **DECLARATION AND SIGNATURE**

I allow the use and processing of my personal data according to the *Dlgs* 196/2003 concerning the handling of personal data

Chiannalrucco