



Erika Giuffrida

Nationality: Italian **Date of birth:** 29/11/1996 **Phone number:** (+39) 3494637113

Email address: erika.giuffrida@gmail.com

Home: 4, Principe di Piemonte Street, 95029 Viagrande (CT) (Italy)

WORK EXPERIENCE

Professor Claudio Bucolo, Department of Biomedical and Biotechnological Sciences, UNICT – Catania, Italy

City: Catania | Country: Italy

Post-doctoral research fellow

[16/01/2025 – 15/01/2026]

Project title: "A dual serotonin receptor approach in the treatment of cognitive and retinal dysfunctions induced by methamphetamine in male and female rats"

Ocular preclinical research

Professor Claudio Bucolo, Department of Biomedical and Biotechnological Sciences, UNICT – Catania, Italy

City: Catania | Country: Italy

Ph.D. student in Neuroscience

[01/12/2021 – 30/11/2024]

Project title: "R&D innovation to develop the pharmaceutical industry system: focus on retinal diseases"

Ocular preclinical research

SIFI S.p.A. – Aci Sant'Antonio (CT), Italy

City: Aci Sant'Antonio (CT) | Country: Italy

Pharmaceutical company internship

[02/10/2023 – 24/05/2024]

Experimental validation of drug targets identified through *in silico* studies, in an *in vitro* model of glaucoma.

Take part to the pharmaceutical company experimentation

Professor Roberta Foresti, Faculty of Medicine, University Paris Est Créteil – Créteil, France

City: Créteil | Country: France

Visiting PhD student

[16/01/2023 – 28/07/2023]

Evaluation of ADR1D and ADR2C involvement in an *in vitro* model of diabetic retinopathy

Professor Velia D'Agata, Department of Biomedical and Biotechnological Sciences, UNICT – Catania, Italy

City: Catania | Country: Italy

Thesis student

[09/2020 – 07/2021]

Experimental thesis, title: "Effect of NAP on the corneal epithelium exposed to UV-B rays"

 **Leonardi Pharmacy** – Trecastagni, CT, Italy

City: Trecastagni, CT | Country: Italy

Professional internship

[16/09/2019 – 05/03/2020]

Pharmacy activities training

EDUCATION AND TRAINING

Training Course 3.2 – 6.2 – 8. DM 5 AGOSTO 2021 for rodents

Center for Advanced Preclinical in vivo Research (CAPIR). University of Catania [24/02/2025 – 25/02/2025]

City: Catania | Country: Italy

Pharmacist professional qualification

Department of Drug and Health Sciences, University of Catania [18/11/2021]

City: Catania | Country: Italy | Website: <https://www.unict.it/> | Final grade: 60/60

Master degree in Pharmacy

Department of Drug and Health Sciences, University of Catania [23/07/2021]

City: Catania | Country: Italy | Final grade: 110/110 with honors and proposal to "Ordine dei farmacisti" thesis award

High School Diploma

Scientific Lyceum, "Gulli e Pennisi" [2010 – 2015]

City: Aci Bonaccorsi, Catania | Country: Italy | Final grade: 100/100

HONOURS AND AWARDS

[01/02/2023] Italian Society of Pharmacology (SIF)

SIF short period abroad research scholarship Awarding institution

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Microsoft Office Application (Word, Excel, Powerpoint) / email / Internet / Social Media\Social Network / google / zoom / Image J / GraphPad Prism

CONFERENCES AND SEMINARS

[17/12/2021] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Neurobiology and treatment of stress-related mental disorders". Prof. Dominik Wincewicz

[25/02/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Insulin signaling and brain disorders", Prof. David Slattery

[25/03/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Post-COVID depression: a provocative testing of the immunopsychiatry of mood disorders", Prof. Francesco Benedetti

[07/04/2022 – 22/04/2022] Department of Structural, Geotechnical and Building Engineering, Politecnico di Torino
Training course: "Structural models for the investigation of protein dynamics"

[22/04/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Neurobiological basis of ocular neuropathic pain", Prof. Juana Martinez Gallar

[27/05/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Maternal behaviour and mood disease", Prof. Kamilla Miskowiak

[07/06/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Seminar: "Rischio chimico e biologico nel laboratorio di ricerca: utilizzo in sicurezza dei dispositivi di protezione collettiva"

[24/06/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "The future of Immunopsychiatry", Prof. Livia De Picker

[30/06/2022] Digital edition

Workshop: "Intended learning outcomes In silico medicine"

[18/07/2022 – 22/07/2022] Catania, Italy

19th Catania International Summer School of Neuroscience: "RARE DISEASES AND NEUROSCIENCES"

[22/07/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Psychological predictors of negative treatment in chronic migraine", Prof. Cristina Tassorelli

[26/07/2022]

Seminar: New platform for an accurate diagnosis and staging of cancer with "liquid biopsy", Prof. Salvatore Pernagallo

[05/10/2022 – 07/10/2022] Catania, Italy

Workshops on the Industrial PhD in EUNICE European University

[10/11/2022] Department of Biomedical and Biotechnological Sciences, University of Catania

Seminar: "Dalla Ricerca esplorativa allo Sviluppo Clinico: mappa (pre- SARS CoV) del tortuoso percorso di sviluppo di un vaccino basato sull'impiego della piattaforma tecnologica delle mOMV (Vescicole di membrana batterica esterna, modificata)"

[22/11/2022] Azienda Ospedaliero Universitaria Policlinico "G.Rodolico – San Marco"

Workshop: "Tips & Trics CAS Scifinder-n"

[06/05/2023] Webinar

SIF-EUCP: "Leadership skills in key decisions: a crucial aspect in clinical trial design and data interpretation"

[10/05/2023] École Nationale Vétérinaire d'Alfort, Maisons-Alfort (France)

Seminar: "Novel modulators of Duchenne muscular dystrophy in satellite cells, muscle, heart and more". Prof. Józef Dulak

[08/09/2023] Policlinico "G. Rodolico-San Marco"

Training course: "Neuroftalmologia alla portata di tutti: Occhio, cervello, genetica"

[21/11/2023] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Le dipendenze comportamentali: prevenzione e cura". Prof. Stefano Pallanti

[12/01/2024] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Treating resistant depression in 2024 and beyond". Prof. Andrea Fagiolini

[23/02/2024] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "The present and the future of IPC technology for personalized medicine in neuropsychiatric disorders". Prof.ssa Luigina Collo

[22/03/2024] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "The Psychopharmacology of Psychosis: Past, Present and Future". Prof. Robert McCutcheon

[07/03/2025] Azienda Ospedaliero Universitaria Policlinico «G. Rodolico - San Marco»

Lectio magistralis European Frontiers in Neuroscience: "Role of inflammation in macular fibrosis". Prof. Mei Chen

[11/04/2025] Department of Biomedical and Biotechnological Sciences, University of Catania

Lectio magistralis European Frontiers in Neuroscience: "Neurobiological basis of ocular neuropathic pain". Prof. Juana Martinez Gallar

PUBLICATIONS

[2024]

The Identification of New Pharmacological Targets for the Treatment of Glaucoma: A Network Pharmacology Approach

Authors: Giuffrida, E., Platania, C. B. M., Lazzara, F., Conti, F., Marcantonio, N., Drago, F., & Bucolo, C.

Pharmaceuticals (Basel). Published 2024 Oct 5. doi:10.3390/ph17101333

[2025]

α 1D Adrenergic Receptor Antagonism Protects Against High Glucose-Induced Mitochondrial Dysfunction and Blood Retinal Barrier Breakdown in ARPE-19 Cells

Authors: Giuffrida, E., Platania, C. B. M., Lazzara, F., Conti, F., Sotera, L., Drago, F., Herath, D., Motterlini, R., Foresti, R., & Bucolo, C.

International journal of molecular sciences, 26(3), 967. <https://doi.org/10.3390/ijms26030967>

[2025]

Blockade of P2X7 receptors preserves blood retinal barrier integrity by modulating the plasmalemma vesicle-associated protein: Implications for diabetic retinopathy

Authors: Platania, C. B. M., Lazzara, F., Mitton, K., Haque, N., Dailey, W., Conti, F., Giuffrida, E., Drago, F., Hermenean, A., Balta, C., Herman, H., Ciceu, A., Trotta, M. C., D'Amico, M., Nicosia, G., Rossi, S., & Bucolo, C.

British journal of pharmacology, 182(12), 2603–2620. <https://doi.org/10.1111/bph.70007>

[2025]

Retinal Protection of New Nutraceutical Formulation

Authors: La Rosa, L. R., Pepe, V., Lazzara, F., Romano, G. L., Conti, F., Giuffrida, E., Bucolo, C., Viola, S., De Pasquale, G., Curatolo, M. C., & Zappulla, C.

Pharmaceutics, 17(1), 73. <https://doi.org/10.3390/pharmaceutics17010073>

[2024]

Integrating network pharmacology: The next-generation approach in ocular drug discovery

Authors: Lazzara, F., Conti, F., Giuffrida, E., Eandi, C. M., Drago, F., Platania, C. B. M., & Bucolo, C.

Curr Opin Pharmacol. Published online January 5, 2024. doi: 10.1016/j.coph.2023.102425

POSTER E ABSTRACT

[16/11/2022 – 19/11/2022]

Computational systems biology approach: implications in glaucoma. 41° Congresso Nazionale della Società Italiana di Farmacologia (SIF)

Erika Giuffrida, Chiara Bianca Maria Platania, Filippo Drago, Claudio Bucolo

[13/11/2024 – 16/11/2024]

Network pharmacology approach to identify new pharmacological targets for glaucoma. 42° Congresso Nazionale della Società Italiana di Farmacologia (SIF)

Erika Giuffrida, Chiara Bianca Maria Platania, Filippo Drago, Claudio Bucolo

[09/10/2025 – 11/10/2025]

Corneal endothelium protective effect of taurine-based ophthalmic surgical devices. 28th European Association for Vision and Eye Research (EVER) CONGRESS

Francesca Lazzara, Federica Conti, Grazia Maugeri, Erika Giuffrida, Giuseppe Lo Giudice, Matteo Cereda, Claudio Bucolo

[09/10/2025 – 11/10/2025]

Dual serotonergic ligand exerts protective effect in an in vitro model of blood retinal barrier breakdown. 28th European Association for Vision and Eye Research (EVER) CONGRESS

Claudio Bucolo, Chiara Bianca Maria Platania, Erika Giuffrida, Francesca Lazzara

[09/10/2025 – 11/10/2025]

Design of selective PI3K δ inhibitors for diabetic retinopath. 28th European Association for Vision and Eye Research (EVER) CONGRESS

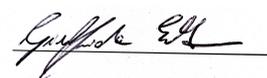
Chiara Bianca Maria Platania, Carmela Bonaccorso, Cristina Munzone, Isabel La Rosa, Erika Giuffrida, Francesca Lazzara, Claudio Bucolo

TECHNICAL SKILLS

Cell cultures (ARPE-19, HREC, SIRC, MIO-M1, HTMC), Western blot, Seahorse XF technology. RNA and protein extraction, RT and Real-time PCR, cytotoxicity assay (MTT, LDH-ATPlite, ROS). Transepithelial Electrical Resistance (TEER) measurements, FITCH-dextran Permeability assay and statistical analysis.

Ai sensi dell'art. 46 e 47 del DPR 445/2000, dichiaro che le informazioni inserite nel mio CV corrispondono a verità, essendo consapevole dell'eventuale applicazione dell'art.76 dello stesso articolo in caso di dichiarazione mendace. La sottoscritta dichiara inoltre di essere informato, ai sensi e per gli effetti del D.Lgs. n. 196/2003 ss.mm.ii. e del GDPR n. 2016/679 e del D.Lgs. n. 101/2018, che i dati raccolti saranno trattati esclusivamente nell'ambito del procedimento.

Catania, 21/11/2025



Erika Giuffrida