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F | 03 June 1983 | Italian

Languages: Italian, English, French



CAREER SUMMARY

October 2021 – present: Assistant Professor RTD-B in Human Anatomy, Università degli Studi di Torino, Torino (Italy) *teaching “Morfologia delle cellule e degli organi umani di interesse biotecnologico”, Corso di Laurea Magistrale in Biotecnologie Mediche; “Anatomia Umana e Neuroanatomia”, Lauree Triennali Sanitarie; “Attività didattiche integrative (ADI/ADE) Anatomia umana e Neuroanatomia”, Laurea Magistrale in Medicina e Chirurgia.*

June 2019 – September 2021: Assistant Professor RTD-A in Human Anatomy, Università degli Studi di Torino, Torino (Italy) *teaching “Anatomia Umana e Neuroanatomia”, Lauree Triennali Sanitarie; “Attività didattiche integrative (ADI/ADE) Anatomia umana e Neuroanatomia”, Laurea Magistrale in Medicina e Chirurgia.*

October 2018 – present: Research Associate, Neuroscience Institute Cavalieri Ottolenghi (NICO), Università degli Studi di Torino - *Prof. Alessandro Vercelli group – Morpho-functional features of mitochondria and iron metabolism/deposition in aging and neurodegeneration (Alzheimer’s disease and Motor Neuron diseases).*

October 2016 – July 2018: Research Associate, UCLouvain, Institute of Neuroscience (IoNS), Bruxelles (Belgium) - *Prof. Pascal Kienlen-Campard group – Research on Alzheimer’s disease protein – control of neuromuscular function.*

October 2014 – March 2016: Research Assistant, UCLouvain, IoNS, Bruxelles (Belgium) - *Prof. Pascal Kienlen-Campard group - Alzheimer’s disease protein transcriptional activity.*

February 2011 – September 2014: Postdoctoral Fellow, UCLouvain, IoNS, Bruxelles (Belgium) - *Prof. Jean-Noel Octave group –Study of Amyloid Precursor Protein physiopathological functions.*

October 2007 – December 2010: Ph.D. candidate, Università degli Studi di Pavia, Dep. of Drug Sciences, Pavia (Italy) - *Prof. Marco Racchi group– Research activity on Alzheimer’s Disease prevention and pathogenic mechanisms.*

October 2004 – September 2005: Visiting Research Trainee, Innovate Biotechnology S.r.l., Tortona (Italy) - *Prof. Marco Terreni & Dr. Daniela Ubiali group – Enzymatic synthesis of anti-cancer drugs from B. subtilis.*

EDUCATION & QUALIFICATIONS

- **National Scientific qualification as associate, Academic Recruitment Field 05/H - Human anatomy and histology, according** to the Italian higher education system, in the call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 05/H1 - Human anatomy. The validity of the qualification is eleven years, starting from the 03/02/2022 and will expire on the 03/02/2033;
- **Higher Education Master Degree in Translational Medicine (Interdisciplinary Program of the Institute for interdisciplinary innovation in healthcare I3H & Université Libre de Bruxelles, ULB)** (10CFU-300h February-March 2018); thesis entitled: “Vaccination of children in Italy: a translational case study”;

- **Ph.D. in Pharmacological Sciences** Università degli Studi di Pavia (Italy), (2007-2010) Ciclo XXIII 22/12/2010;
- **Master's degree in Medical and Pharmaceutical Biotechnology** Università degli Studi di Pavia (Italy), 110/110 cum laude (2005-2007) 20/07/2007;
- **Bachelor's degree in Chemical and Pharmaceutical Biotechnology** Università degli Studi di Pavia (Italy) (2002-2005)
- **Bilingual Scientific Baccalaureate** Liceo Scientifico L. Da Vinci, Crema (CR – Italy);
- 2022: Conseguitamento corsi formazione Edizione 2022 **Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna**: 1) LEGISLAZIONE NAZIONALE ED ETICA 2) BIOLOGIA E GESTIONE DEGLI ANIMALI DA LABORATORIO 3) ETICA E CONCEZIONE DEI PROGETTI, DM 5 AGOSTO 2021.
- 2021: **IRIDI START** “Insegnamento di qualità in presenza e a distanza, valutazione e inclusione partecipante” (UniTO, 19/11/21);
- 2018: **Course on Laboratory Animal Science** (NICO – Torino, Italy) (11-12/10/2018);
- 2015: **Advanced Microscopy and Vital Imaging Course** (8-12 June Maastricht University);
- 2012: **Advanced Course on Laboratory Animal Science** (UCLouvain) FELASA requirements LEVEL C: MD2290 (3CFU 35h theory + 10h practice) and MD2291 “Maître d’expérience” (3CFU 29h theory + 6h practice);
- 2009: **Professional Biologist Qualification** (Università degli Studi di Pavia, Italy).

PROFESSIONAL EXPERIENCE

August 2023 - November 2023

Visiting Project Scientist, Cedars-Sinai, Los Angeles, California, USA in *Prof. Clive Svendsen's team*

By virtue of the IBRO Collaborative Research Grant award I received for the building of a collaboration with Pr. Clive Svendsen in Cedars Sinai, Los Angeles (CA, USA) for 2023-2024, I have been Visiting Scientist in the Regenerative Medicine Center (RMI) directed by Pr. Clive Svendsen for 4 months. There, I have been trained on iPSCs maintenance and differentiation into Cortical Neurons with the collaboration of Dr. Deepthi Lall and Pr. Frank Diaz, senior scientists in the group.

March 2023 – April 2023

Visiting Scientist, Collège de France, Paris, France in *Prof. Alain Prochiantz's and Ariel di Nardo's team*

By virtue of the Grant for Internationalization 2023 (GFI 2023) obtained as PI from the University of Turin, I have been Visiting Scientist in the laboratory of Development and Neuropharmacology - LabCom team directed by Pr. Ariel Di Nardo and Pr. Alain Prochiantz at Collège de France, Paris. There, I have been trained on iPSCs maintenance and differentiation into Motor Neurons with the guidance of Dr. Elizabeth Di Lullo, senior researcher and Associate Director Discovery Biology, BrainEver.

October 2021 – present

Assistant Professor in tenure track (RTD-B) in *Prof. Alessandro Vercelli's team Neuroscience Institute Cavalieri Ottolenghi (NICO), Università degli Studi di Torino, Orbassano (Italy)*

In addition to teaching, my current research activity is focused on the study of mitochondrial dysfunction and iron metabolism in healthy aging and neurodegenerative diseases such as Alzheimer's disease (AD),

Amyotrophic Lateral Sclerosis (ALS) and Spinal Muscular

Atrophy (SMA). Unveiling the molecular mechanisms behind brain aging and degeneration will lead to finding new therapeutic targets and potential biomarkers for early diagnosis and to test treatments' efficacy.

June 2019 – September 2021

Assistant Professor (RTD- A) in *Prof. Alessandro Vercelli's team NICO, Università degli Studi di Torino*

In addition to teaching, the research activity of that period was focused on the study of mitochondrial dysfunction in Spinal Muscular Atrophy (SMA). I investigated mitochondrial alterations and contribution to SMA etiology in the spinal cord, NMJs and muscles of the murine model of the disease (strain SMNdelta7). The aim of the research was to find specific mitochondrial alterations which could be used as new therapeutic targets and potential biomarkers of the disease, to monitor its progression and to test treatments' efficacy.

October 2018 – May 2019

Research Associate in *Prof. Alessandro Vercelli's team NICO, Università degli Studi di Torino*

My research activity was focused on the study of mitochondrial dysfunction and autophagy in Spinal Muscular Atrophy (SMA). I investigated mitochondria alterations and contribution to SMA etiology in the three main districts affected by the disease: spinal cord, NMJs and muscles.

2016 – 2018

Research Associate (Chargée de Recherches) in *Prof. Pascal Kienlen-Campard's team Université catholique de Louvain (UCLouvain), Institute of Neuroscience (IoNS), Bruxelles (Belgium)*

My research activity was focused on the study of GDNF expression by Presenilin (PS) and on the implications in neurodegenerative and neuromuscular diseases such as Amyotrophic Lateral Sclerosis (ALS). I coordinated a multi-collaborative and translational project. I collaborated with Pr. Vincent Van Pesch and Pr. Adrian Ivanoiu (UC Louvain/Cliniques universitaires Saint-Luc) and Dr. Daniela Rossi (Fondazione Salvatore Maugeri, Pavia, Italy). Team work and supervision of a master student intern, a visiting master student from the Trinity College (Dublin), a Ph.D. student and a technician showing capacity to fine-tune and coordinate the activity of a unit.

2014 – 2016

Research Assistant in *Prof. Pascal Kienlen-Campard's team UCLouvain, IoNS, Bruxelles (Belgium)*

The main aim of the project was to understand the molecular mechanisms recruited by PS in the control of the *GDNF* transcription. Team work and supervision of a master student intern, a Ph.D. student and a technician. Teaching: SBIM13 AY 2015 and 2016 "Workshop on experimental strategy in cellular and molecular biology".

2011 – 2014

Postdoctoral Fellow in *Prof. Jean-Noel Octave's team UCLouvain, IoNS, Bruxelles (Belgium)*

Soon after having obtained the Ph.D., I started my postdoc fellowship as part of a team which aimed to discover Amyloid Precursor Protein (APP) physiopathological function. My studies demonstrated for the first time that APP controls the expression of a neurotrophic factor, the GDNF, fundamental for both CNS and PNS neuron survival and altered in Alzheimer's patients. Team work and supervision of a master student research intern. Teaching: SBIM13 AY 2014 "Workshop on experimental strategy in cellular and molecular biology".

2007 - 2010

Ph.D. student in *Prof. Marco Racchi's team Università degli Studi di Pavia, Dep. of Drug Sciences, Pavia*

As Ph.D. student in Pharmacological Sciences my research activity was dedicated to the prevention of Alzheimer's Disease and to the understanding of its pathogenic mechanism, in order to identify therapeutic targets. Thesis title: "p53 in Alzheimer's disease: from biomarkers to molecular mechanisms".

2004 - 2005

Visiting research trainee in *Prof. Marco Terreni & Dr. Daniela Ubiali's team Innovate Biotechnology S.r.l., Tortona (Italy)*

During my experimental Bachelor's degree in Chemical and Pharmaceutical Biotechnology I collaborated as visiting research trainee to the research activity of the Company focused on the enzymatic synthesis of anti-

cancer drugs from *B. subtilis*. Thesis title: "Enzymatic synthesis of thymidine and floxuridine by transglycosylation catalyzed by Uridine phosphorylase from *B. subtilis*".

ACADEMIC AWARDS

- **Award for the productivity in the research activity** from Università degli studi di Torino (Premialità RTD-B), Anno 2023;
- **Award** from the "International Brain Research Organization - IBRO", **IBRO Collaborative Research Grant**, Year 2023-2024, to foster an international scientific collaboration between IBRO regions (Europe/Italy and USA/CA). The main goal of the award is to facilitate collaboration between one emerging and one established research group;
- Winner of a **Travel Grant** from the **Italian Society for Neuroscience (SINS)** for the participation at the National Congress on September 26/29-2019, Perugia (Italy);
- **Winner of the 'Prix Lagast 2018'** assigned every two years by the Health sector of the **UCLouvain, Cliniques universitaires Saint-Luc and CHU UCL Namur (Belgium)**. The jury was composed by the CREC (conseil de recherche) and by Pr Frédéric Houssiau (vice-recteur SSS). I have been awarded for my research studies on genetic neuromuscular diseases resumed in the work entitled: "A Role for GDNF and Soluble APP as Biomarkers of Amyotrophic Lateral Sclerosis Pathophysiology" Published in *Front. Neurol.*, 2018 doi.org/10.3389/fneur.2018.00384;
- **Career Upgrade** from Research Assistant to "**Research Associate - Chargée de Recherches**" from the selection committee of the Belgian Ministry for research "Fonds de la Recherche Scientifique (FNRS)", Bruxelles, Belgium: 1/10/2016;

FUNDED GRANTS

1. **Funded Grant as principal investigator (PI UniTO) and Coordinator** (from October 2023 till may 2024) "TARGETING mACONITASE AND KIF5A TO RESCUE MITOCHONDRIAL MOBILITY AND FUNCTION FOR THE TREATMENT OF MOTOR NEURON DISEASES" from MIUR - Ministero dell'Università e della Ricerca, **PRIN 2022** Year 2023, Associated Investigator, PI: Valeria Valsecchi, Università degli Studi di Napoli Federico II;
2. **Minoryx Therapeutics S.L.** grant as **principal investigator (PI)** "Evaluation of the effect of leriglitazone on brain iron deposits in a murine model of Alzheimer's disease", Year 2023-2025,
3. **Funded Grant as principal investigator (PI)** "Grant for Internationalization" from UNITA - Universitas Montium, Year 2023, to foster an international scientific collaboration with Universidade da Beira Interior Faculdade de Ciências da Saúde: Covilha, Castelo Branco, PT, PI: Ana Clara Cristova;
4. **Funded Grant as principal investigator (PI)** "Grant for Internationalization" from the University of Turin, Year 2023, to foster an international scientific collaboration with Development and Neuropharmacology/LabCom team, PIs: Ariel Di Nardo, CR-CN CNRS; Alain Prochiantz, Pr. Em. Collège de France, BrainEver CSOCollège de France (Paris, France);
5. **Funded Grant as principal investigator (PI)** from the "Fondazione CRT", Anno 2022-2024, for the project entitled: "Braccio di ferro con la demenza: ferro e mitocondri come nuovi target contro la Malattia di Alzheimer";
6. **Funded Grant as principal investigator (PI)** from the "Finanziamento di progetti di ricerca dall'Università degli studi di Torino (ex 60%), Anno 2021, linea A" for the project entitled: "Study of mitochondrial dysfunction as an early marker of aging and neurodegeneration";

7. **Funded Grant as principal investigator (PI)** from the “Finanziamento di progetti di ricerca dall’Università degli studi di Torino (ex 60%), Anno 2020, linea A” for the project entitled: “Role of mitochondrial dysfunctions in the aetiology and progression of neurodegenerative diseases”;
8. Recipient of a **Starting Grant** from the Department of Neuroscience, University of Turin (Italy), for the position obtained as Assistant Professor (Tenure track); “Assegnazione **Fondo Dipartimentale** destinato ai nuovi ricercatori assunti nel 2019 - Dott.ssa STANGA Serena”
9. **Funded Grant** as collaborator from the **S.A.O./F.R.A. Stichting voor Alzheimer Onderzoek/Foundation for Research on Alzheimer's disease** 2015-2017 Standard Award for the project entitled “Control of GDNF expression by Amyloid Precursor Protein & Presenilins and implications in neurodegenerative and neuromuscular diseases”, PI: Pr. Pascal Kienlen-Campard (UCLouvain).

FUNDED GRANTS - SPONSORSHIPS FOR CONFERENCES

1. **Funded Grant** from **The Company of Biologists** as PI to support the organization of the third edition of the Conference entitled “Motor neuron diseases: understanding the pathogenetic mechanisms to develop therapies”, co-organized with Pr. Marina Boido, to be held in Turin on 8-9.11.2024;
2. **Funded Grant** from **The Company of Biologists** as PI to organize the symposium entitled “In pursuit of healthy brain aging: unveiling the biology of age-related mechanisms leading to dementia” organized during the 20th National SINS congress held in Turin 14-17.09.2023;
3. **Funded Grant** from **The Company of Biologists** to support the organization of the Virtual Conference entitled “Motor neuron diseases: understanding the pathogenetic mechanisms to develop therapies”, PI: Pr. M. Boido, co-organizer: S. Stanga, 6-7.11.2020;
4. **Sponsorship** from Media System Lab for the organization of the Virtual Conference entitled “Motor neuron diseases: understanding the pathogenetic mechanisms to develop therapies”, organizers: Pr. M. Boido and S. Stanga, 6-7.11.2020;

PEER-REVIEWED PUBLICATIONS

H-index: 19 (Google Scholar), 16 (Scopus); **Citations:** 840 (Google Scholar), 594 (Scopus)

1. Mezzanotte M, **Stanga S***. Brain Iron Dyshomeostasis and Ferroptosis in Alzheimer’s Disease Pathophysiology: Two Faces of the Same Coin. Aging and disease. 2024 <https://doi.org/10.14336/AD.2024.0094>. ***corresponding author**
2. Audouard E, Khefif N, Gillet-Legrand B, Nobilleau F, Bouazizi O, **Stanga S**, Despres G, Alves S, Lamazière A, Cartier N, Piguet F. Modulation of Brain Cholesterol Metabolism through CYP46A1 Overexpression for Rett Syndrome. *Pharmaceutics* 2024, *16*, 756. <https://doi.org/10.3390/pharmaceutics16060756>.
3. Ricci FS, **Stanga S**, Mezzanotte M, Marinaccio C, D’Alessandro R, Somà A, Sottemano S, Conio A, Morana G, Spada M, Boido M, Mongini TE. Biochemical characterization on muscle tissue of a novel biallelic ACO2 mutation in an infant with progressive encephalopathy. *JIMD Rep.* 2023 Dec 15;65(1):3-9. doi: 10.1002/jmd2.12400.
4. Panuzzo C, Pironi L, Maglione A, Rocco S, **Stanga S**, Riganti C, Kopecka J, Shahzad Ali M, Pergolizzi B, Bracco E, Cilloni D. mTORC2 Is Activated under Hypoxia and Could Support Chronic Myeloid Leukemia Stem Cells. *Int. J. Mol. Sci.* 2023, *24*(2), 1234; doi.org/10.3390/ijms24021234.
5. Canciani A, Capitanio C, **Stanga S**, Faravelli S, Scietti L, Mapelli L, Soda T, D’Angelo E, Kienlen-Campard P, Forneris F. Deconstruction of Neurotrypsin Reveals a Multi-factorially Regulated Activity Affecting Myotube Formation and Neuronal Excitability. *Mol Neurobiol.* 2022 Oct 5; doi: 10.1007/s12035-022-03056-2.

6. Mezzanotte M, Ammirata G, Boido M, **Stanga S***, Roetto A*. Activation of the Heparin-Ferroportin1 pathway in the brain and astrocytic-neuronal crosstalk to counteract iron dyshomeostasis during aging. **Sci Rep.** **2022** Jul 9;12(1):11724. doi: 10.1038/s41598-022-15812-4. ***co-last & *corresponding author**
7. Contino S, Suelves N, Vranx C, Vadukul MD, Payen VL, **Stanga S**, Bertrand L and Kienlen-Campard P. Presenilin-deficient neurons and astrocytes display normal mitochondrial phenotypes. **Front. Neurosci.** **2021**; January 22; doi: 10.3389/fnins.2020.586108
8. **Stanga S***, Boido M and Kienlen-Campard P. How to build and to protect the neuromuscular junction: the role of the Glial cell line-Derived Neurotrophic Factor. **IJMS**, **2021** ***corresponding author** online December 24 2020; doi: 10.3390/ijms22010136
9. Wyart E, Bindels LB, Mina E, Menga A, **Stanga S**, Porporato PE. Cachexia, a systemic disease beyond muscle atrophy. **IJMS**, **2020** November 14; doi: 10.3390/ijms21228592
10. Menduti G*, Rasà DM*, **Stanga S***, Boido M. Drug screening and drug repositioning as promising therapeutic approaches for Spinal Muscular Atrophy treatment. **Front. Pharmacol**, **2020** November 12; doi: 10.3389/fphar.2020.592234. ***co-first authors**
11. Calabrese C*, Panuzzo C*, **Stanga S**, Andreani G, Ravera S, Maglione A, Pironi L, Petiti J, Ali MS, Scaravaglio P, Fava C, De Gobbi M, Frassoni F, Saglio G, Bracco E, Pergolizzi B, Cilloni D. Deferasirox-dependent iron chelation enhances mitochondrial dysfunction and restores p53 signaling by stabilization of p53 family members in leukemic cells. **IJMS**, **2020** October 16; doi: 10.3390/ijms21207674
12. Panuzzo C, Jovanovski A, Pergolizzi B, Pironi L, **Stanga S**, Fava C, Cilloni D. Mitochondria: A Galaxy in the Hematopoietic and Leukemic Stem Cell Universe. **IJMS**, **2020** May 30;21(11):3928. doi: 10.3390/ijms21113928.
13. **Stanga S***, Caretto A, Boido M, Vercelli A. Mitochondrial Dysfunctions: A Red Thread across Neurodegenerative Diseases. **IJMS**, **2020** May 25;21(10):3719. doi.org/10.3390/ijms21103719. ***corresponding author**
14. Opsomer R, Contino S, Perrin F, Gualdani R, Tasiaux B, Doyen P, Vergouts M, Vranx C, Doshina A, Pierrot N, Octave JN, Gailly P, **Stanga S**, Kienlen-Campard P. Amyloid Precursor Protein (APP) controls excitatory/inhibitory synaptic inputs by regulating the transcriptional activator Neuronal PAS Domain Protein 4 (NPAS4). **eNeuro**. **2020** May 28;7(3) doi: 10.1523/ENEURO.0322-19.2020.
15. **Stanga S***, Brambilla L, Tasiaux B, Dang AH, Ivanoiu A, Octave JN, Rossi D, van Pesch V, Kienlen-Campard P. A Role for GDNF and Soluble APP as Biomarkers of Amyotrophic Lateral Sclerosis Pathophysiology. **Front. Neurol.**, **2018** May 30;9:384 doi.org/10.3389/fneur.2018.00384. ***corresponding author**
16. Contino S, Porporato PE, Bird M, Marinangeli C, Opsomer R, Sonveaux P, Bontemps F, Dewachter I, Octave JN, Bertrand L, Kienlen-Campard P*, **Stanga S***. Presenilin 2-Dependent Maintenance of Mitochondrial Oxidative Capacity and Morphology. **Front Physiol.** **2017** Oct 12;8:796. doi: 10.3389/fphys.2017.00796. eCollection 2017. ***co-last author & *corresponding author**
17. **Stanga S**, Vranx C, Tasiaux B, Marinangeli C, Karlström H, Kienlen-Campard P. Specificity of presenilin-1- and presenilin-2-dependent γ -secretases towards substrate processing. **J Cell Mol Med.** **2017** Oct 10. doi: 10.1111/jcmm.13364.
18. Decock M, **Stanga S**, Octave JN, Dewachter I, Smith SO, Constantinescu SN, Kienlen-Campard P. Glycines from the APP GXXXG/GXXXA Transmembrane Motifs Promote Formation of Pathogenic A β Oligomers in Cells. **Front Aging Neurosci.** **2016** May 10;8:107. doi: 10.3389/fnagi.2016.00107.
19. **Stanga S**, Zanou N, Audouard E, Tasiaux B, Contino S, Vendermeulen G, René F, Loeffler JP, Clotman F, Gailly P, Dewachter I, Octave JN, Kienlen-Campard P. APP-dependent Glial cell line-Derived Neurotrophic Factor (GDNF) gene expression drives neuromuscular junction formation. **FASEB J.** **2016** May;30(5):1696-711. doi: 10.1096/fj.15-278739. Epub 2015 Dec 30.

20. Decock M, El Haylani L, **Stanga S**, Dewachter I, Octave JN, Smith SO, Constantinescu SN, Kienlen-Campard P. Analysis by a highly sensitive split luciferase assay of the regions involved in APP dimerization and its impact on processing. **FEBS Open Bio**. 2015 Sep 6;5:763-73.
21. Hage S, **Stanga S**, Marinangeli C, Octave JN, Dewachter I, Quetin-Leclercq J, Kienlen-Campard P. Characterization of Pterocarpus erinaceus kino extract and its gamma-secretase inhibitory properties. **J Ethnopharmacol**. 2015; 2;163:192- 202.
22. Hage S, Marinangeli C, **Stanga S**, Octave JN, Quetin-leclercq J & Kienlen-Campard P. Gamma-Secretase Inhibitor Activity of a Pterocarpus erinaceus Extract. **Neurodegenerative Diseases**, 2014;14(1):39-51.
23. **Stanga S**, Lanni C, Sinforiani E, Mazzini G, & Racchi M. Searching for predictive blood biomarkers: misfolded p53 in mild cognitive impairment. **Current Alzheimer Research**, 2012; 26(3), 271-405 (1990).
24. **Stanga S**, Lanni C, Govoni S, Uberti D, D'Orazi G & Racchi M. Unfolded p53 in the pathogenesis of Alzheimer's disease: is HIPK2 the link?. **Aging** 2010, 2(9), 545-554.
25. Lanni C*, Nardinocchi L*, Puca R, **Stanga S**, Uberti D, Memo M, Govoni S, D'Orazi, G & Racchi M. Homeodomain interacting protein kinase 2: a target for Alzheimer's beta amyloid leading to misfolded p53 and inappropriate cell survival. **PLoS One**, 2010, 5(4), e10171. doi :10.1371/journal.pone.0010171
26. Lenzken SC, **Stanga S**, Lanni C, De Leonardis F, Govoni S & Racchi M. Recruitment of casein kinase 2 is involved in AbetaPP processing following cholinergic stimulation. **Journal of Alzheimer's disease**, 2010, 20(4), 1133-41., doi :10.3233/JAD-2010- 090232.
27. Lanni C, **Stanga S**, Racchi M & Govoni S. The expanding universe of neurotrophic factors: therapeutic potential in aging and age-associated disorders. **Current Pharmaceutical Design**, 2010,16(6), 698-717.
28. Lanni C, Racchi M, **Stanga S**, Mazzini G, Ranzenigo A, Polotti R, Memo M, Govoni S & Uberti D. Unfolded p53 in blood as a predictive signature signature of the transition from mild cognitive impairment to Alzheimer's disease. **Journal of Alzheimer's Disease**, 2010, 20(1), 97-104. doi :10.3233/JAD-2010-1347.
29. Lanni C, Racchi M, Uberti D, Mazzini G, **Stanga S**, Sinforiani E, Memo M & Govoni S. Pharmacogenetics and pharmacogenomics, trends in normal and pathological aging studies: focus on p53. **Current Pharmaceutical Design**, 2008,14(26), 2665-2671.

BOOK CHAPTER

1. Lanni C, **Stanga S**, Lucchelli A & Govoni S. Depressione: le nuove ipotesi sulle basi biologiche e il razionale di impiego e sviluppo dei farmaci antidepressivi. Italy: **Tema farmacia**, 2008, anno XXVI 2, 24-39.

PUBLISHED CONGRESS PROCEEDINGS

1. Malacrida A., Tarasiuk O., Rodriguez-Menendez V., **Stanga S.**, Pero M.E., Bartolini F., Nicolini G., Cavaletti G., Meregalli C. "Proteasome inhibitors-based chemotherapy induced neurotoxicity: focus on cytoskeletal and mitochondrial dysfunction". Journal of the Peripheral Nervous System (JPNS) 2024 May; Volume 29: Abstracts of the Fourteenth Annual Meeting of the Associazione italiana per lo studio del Sistema Nervoso Periferico (ASNP), 30 May – 1 June 2024, Trieste, Italy.
2. Somà A., Ricci F.S., **Stanga S.**, Mezzanotte M., Marinaccio C., D'Alessandro R., Sottemano S., Morana G., Spada M., Boido M., Mongini T.E. "A novel compound homozygous ACO2 mutation in an infant with fatal progressive encephalopathy: biochemical characterization on muscle tissue". **Acta Myol**. 2023 Jun; 42(1 Suppl 1): 41–113. Published online 2023 Jun 1. doi: 10.36185/2532-1900-N90.
3. Mezzanotte M, Ammirata G, Boido M, Roetto A, **Stanga S**. Activation of the hepcidin-ferroportin1 pathway in the brain and astrocytic-neuronal crosstalk to counteract iron dyshomeostasis during aging. 94

- National Congress of the Italian Society of Experimental Biology Torino, Italy, 6-9 April 2022, **Journal of Biological Research 2022**, Volume 95/Supplement 1.
4. Pavarino G*, Zummo FP*, **Stanga S**, Vercelli A, Boido M. The study of mitochondrial morpho-functional dysfunctions in the pathogenesis of spinal muscular atrophy reveals mitochondrial aconitase as a possible biomarker of the disease. 94 National Congress of the Italian Society of Experimental Biology Torino, Italy, 6-9 April 2022, **Journal of Biological Research 2022**, Volume 95/Supplement 1.
 5. Rasà DM, **Stanga S**, Boido M, Vercelli A. 2d and 3d in vitro experimental models to study spinal muscular atrophy and preliminary perform drug screening. 94 National Congress of the Italian Society of Experimental Biology Torino, Italy, 6-9 April 2022, **Journal of Biological Research 2022**, Volume 95/Supplement 1.
 6. Mezzanotte M, Ammirata G, Boido M, **Stanga S**, Roetto A. Age-Dependent BBB Damage Favours Brain Iron Deposits, Activation of them Hepc/Fpn1 Pathway and Astrocytic-Neuronal Crosstalk. Abstracts of the Fourth **Brainstorming Research Assembly for Young Neuroscientists (BraYn)**, Italy, 20–22 October 2021. *Neurol. Int.* 2022, 14, 109–157. <https://doi.org/10.3390/neurolint14010010>.
 7. Mezzanotte M, Ammirata G, Boido M, Roetto A, **Stanga S**. Brain Iron Deposits During Aging: Activation Of The Hepc/Fpn1 Pathway. 31st National Conference of the Italian Group for the Study of Neuromorphology “Gruppo Italiano per lo Studio della Neuromorfologia” G.I.S.N. Milano, November 26-27, 2021. **EHJ**, 2021 ISSN 1121-760X, volume 65/ supplement 3.
 8. **Stanga S**, Pavarino G, Monteleone F, Pergolizzi B, Vercelli A, Boido M. Dysfunctions In Spinal Muscular Atrophy: Focus On Aconitase2. 93rd National Congress of the Italian Society of Experimental Biology Palermo, Italy, 22-25 April 2021, **Journal of Biological Research 2021**, Volume 94/Supplement 1.
 9. **Stanga S**, Pavarino G, Monteleone F, Pergolizzi B, Boido M, Vercelli A. Mitochondrial Alterations In Spinal Muscular Atrophy. Proceedings of the 30th National Conference of the Italian Group for the Study of Neuromorphology “Gruppo Italiano per lo Studio della Neuromorfologia” G.I.S.N. 12-14th.11.20, University of Turin (online); **EHJ**, 2020; V(64)/supplement 3; ISSN 1121-760X.
 10. Lanni C, **Stanga S**, Uberti D, Mazzini G, Sinforiani E, Govoni S, Memo M, Racchi M. Conformationally Altered P53: A Potential Predictive Marker from Mild Cognitive Impairment to Alzheimer’s Disease? Volume 5, Issue 4S, Part, 12 **Alzheimer's Association International Conference on Alzheimer's Disease**, Vienna, Austria, July 2009, Pages P356-P356, doi: 10.1016/j.jalz.2009.04.1227.
 11. Lanni C, Uberti D, Mazzini G, **Stanga S**, Ranzenigo A, Polotti R, Govoni S, Memo M, Racchi M. Conformational Mutant P53 Isoform: A Novel Alzheimer’s Disease Marker? **Proceedings 25th National Conference of the Italian-Society-of-Cytometry-GIC**, Pontificia Università Lateranense, Roma-Città del Vaticano, Volume: 73A, 2008.

TEACHING AND MANAGEMENT

AY 2023/24: “Human Anatomy and Neuroanatomy” at Lauree Triennali Sanitarie: Terapia della Neuro e Psicomotricità dell' Età Evolutiva, Fisioterapia, Ortottica ed Assistenza Oftalmologica and Logopedia” (3CFU, 36h); “Morphology of cells and human organs of biotechnological interest” at Laurea Magistrale in Medical Biotechnology (5CFU, 40h), Università degli Studi di Torino, Italy; Attività didattiche integrative (ADI/ADE) Laurea Magistrale in Medicina e Chirurgia.

AY 2022/23: “Human Anatomy and Neuroanatomy” at Lauree Triennali Sanitarie: Terapia della Neuro e Psicomotricità dell' Età Evolutiva, Fisioterapia, Ortottica ed Assistenza Oftalmologica and Logopedia” (3CFU, 36h), Università degli Studi di Torino, Italy; Attività didattiche integrative (ADI/ADE) Laurea Magistrale in Medicina e Chirurgia.

AY 2021/22: “Human Anatomy and Neuroanatomy” at Lauree Triennali Sanitarie: Terapia della Neuro e Psicomotricità dell' Età Evolutiva, Fisioterapia, Ortottica ed Assistenza Oftalmologica and Logopedia” (3CFU, 36h), Università degli Studi di Torino, Italy; “Human Anatomy II” at Medicina e Chirurgia, Canale D, Università degli Studi di Torino, Italy.

AY 2020/21: “Human Anatomy and Neuroanatomy” at Lauree Triennali Sanitarie: Terapia della Neuro e Psicomotricità dell' Età Evolutiva, Fisioterapia, Ortottica ed Assistenza Oftalmologica and Logopedia” (3CFU, 36h), Università degli Studi di Torino, Italy; “Human Anatomy II” at Medicina e Chirurgia, Canale D, Università degli Studi di Torino, Italy.

AY 2019/20: “Human Anatomy and Neuroanatomy” at Lauree Triennali Sanitarie: Terapia della Neuro e Psicomotricità dell' Età Evolutiva, Fisioterapia, Ortottica ed Assistenza Oftalmologica and Logopedia” (3CFU, 36h), Università degli Studi di Torino, Italy.

AY 2014/15 – AY 2015/16 – AY 2016/17: Adjunct Professor of "Experimental strategy in cellular and molecular biology", Bachelor students from Biomedical Sciences (WSBIM1303, 6CFU 60h) UCLouvain, Belgium.

LABORATORY SUPERVISOR

June 2023 – April 2024: Lisa Cerminara, volunteer with master degree in Biotechnology;

June 2023 - present: Javier Chicote Gonzalez, junior fellow enrolled for the project entitled: “Evaluation of the effect of a new compound on brain iron deposits in a murine model of Alzheimer’s disease” 2023-2025;

May 2022 - present: Mariarosa Mezzanotte, junior fellow enrolled for the project entitled: “Braccio di ferro con la demenza: ferro e mitocondri come nuovi target contro la Malattia di Alzheimer” CRT 2022-2024;

2019- 2021: Daniela Rasà, junior fellow enrolled in the laboratory of Pr. Alessandro Vercelli for the project entitled: “Identification of new druggable targets and potential therapeutic compounds for SMA, using a C. elegans model of neurodegeneration”, 2017-2020 Fondazione Telethon. Head of Unit: Pr. Vercelli; Research network coordinator: Dr. Elia di Schiavi (CNR, Napoli).

THESIS CO-SUPERVISOR

2014 – 2020: Sabrina Contino, PhD student in Biomedical and Pharmaceutical Sciences (UCL), with a project entitled: “Rôle des présénilines dans la morphologie et la fonctionnalité mitochondriale” discussed in September 30th 2020, Supervisor: Pr. Pascal Kienlen-Campard.

11-12/2017 & 04-06/2018: Anselmo Canciani, recipient of an EMBO fellow - visiting PhD student from IUSS University of Pavia, with a project entitled: “An integrative approach to the decryption of neurotrypsin functionality” discussed in May 8th 2020, Supervisor: Pr. Federico Forneris.

BACHELOR and MASTER THESIS SUPERVISOR

2023/2024 – present: Vittoria Rosano, master student in Pharmacy (tutor Pr. E. Marini), University of Turin

2023/2024 – present: Alberto Toce, master student in Biotechnology for Neuroscience, University of Turin

2023/2024 – present: Valentina Tesio, master student in Biotechnology for Neuroscience, University of Turin

2023/2024 – present: Noemi Scimia, master students in Biotechnology for Neuroscience, University of Turin

BACHELOR and MASTER THESIS CO-SUPERVISOR

2022/2023: Alberto Toce, bachelor students in Biotechnology, University of Turin, “Alzheimer’s disease: the role of amyloid-beta and tau, sex differences and recent therapeutic possibilities”, tesi discussa 13/12/2023;

2022/2023: Noemi Scimia, Internship for the master in Biotechnology for Neuroscience, University of Turin;

2021/2022: Edoardo Zucco, bachelor students in Biotechnology, University of Turin; “Il ruolo delle cellule Natural Killer nella Sclerosi Laterale Amiotrofica: cause, approfondimenti e future soluzioni”, tesi discussa 24/03/2023;

2021/2022: Valentina Vaccaneo, bachelor students in Biotechnology, University of Turin; “The burning brain: neuroinflammation as an early phenomenon linking Alzheimer’s disease and depression”, tesi discussa 15/12/2022;

2021/2022: Maisha Aryafar, Internship for the master in Biotechnology for Neuroscience, University of Turin;

2020/2021: Francesco Paolo Zummo master students in Biotechnology, University of Turin; “The involvement of peripheral tissues in Spinal Muscular Atrophy pathogenesis: analysis of mitochondrial network and autophagy profile in human fibroblasts”, tesi discussa 16.12.21;

2020/2021: Gianna Pavarino master student in Biotechnology, University of Turin; “The study of mitochondrial dysfunctions in the pathogenesis of SMA revealed mACO2 as a possible marker of the disease”, tesi discussa 14/10/2021;

2019/2020: Anna Grasso bachelor student in Biotechnology, University of Turin; “Morphofunctional Alterations of Mitochondria In Neurodegenerative Diseases”, discussed the 22/10/2020;

2019/2020: Federica Monteleone master student in ‘Chimica e Tecnologia Farmaceutiche’ - CTF, University of Turin; “Characterization of cellular and ultrastructural alterations in Spinal Muscular Atrophy affected motor neurons”, discussed 19/10/2020;

2018/2019: Gianna Pavarino bachelor student in Biotechnology, University of Turin; “Il ruolo dell’agrina nella formazione e nel mantenimento della giunzione neuromuscolare e nella SMA”, discussed the 23/07/2019;

2016: Emma Mary Hayes, master student from the Trinity College of Dublin for a stage of 3 months at the University of Louvain (UCL) (2016). The research project was focused on the contribution of Presenilin in GDNF expression;

2016: Ophélie Delcorte, master student in Biomedical Sciences, Faculty of Pharmacy and Biomedical Sciences (UCL). Experimental Stage entitled: “Étude du rôle de l'activité catalytique des présénilines dans la régulation de l'expression du Facteur Neurotrophe Dérivé de la Glie (GDNF)” (discussed in June 2016);

2015/2016: Céline Vranx, master student in Biomedical Sciences, Faculty of Pharmacy and Biomedical Sciences (UCL). Her master thesis is entitled: “Analyse comparative de l’activité gamma-secretase dépendante de PS1 et de PS2: effet de mutations et d’inhibiteurs pharmacologiques” (graduation on September 2016);

2013/2014: Sabrina Contino, master student in Biomedical Sciences, Faculty of Pharmacy and Biomedical Sciences (UCL). Her master thesis is entitled: “Rôle du Précurseur du Peptide Amyloïde (APP) dans l’expression du Facteur Neurotrophe dérivé de la glie (GDNF) et leur contribution à la formation des jonctions neuromusculaires” (graduated in September 2014);

2011: Eric Martineau, master student from the University of Montréal (UdeM, Canada) for a stage of 3 months at the University of Louvain (UCL) (2011). The research project was focused on the contribution of Presenilin 1 and 2 (PS1/PS2) in GDNF transcriptional activity;

2009/2010: Franco Sartori, master degree student from the School of Pharmacy, University of Pavia, with a thesis entitled: “p53 conformazionalmente alterata come marcatore predittivo per la malattia di Alzheimer” (graduated in 2010).

INVITED ORAL PRESENTATIONS AT CONFERENCES

1. **Stanga S.** “Brain iron accumulation: a shared hallmark of aging and Alzheimer’s disease?”, **20th Italian Society for Neuroscience - SINS Congress 2023**, 14-17.09.2023 Turin, Italy. Within the **symposium** entitled: “In pursuit of healthy brain aging: unveiling the biology of age-related mechanisms leading to dementia”, sponsored by The Company of Biologists; **Organizer: Stanga S., Chairs: Stanga S.** –Saraceno C.

2. **Stanga S.** “Activation of the hepcidin-ferroportin1 pathway in the brain and astrocytic-neuronal crosstalk to counteract iron dyshomeostasis during aging”. **Women in Neuroscience Symposium 2022 (WIN)**, Tbilisi, Georgia, 13/08/22;

ORAL PRESENTATIONS AT CONFERENCES UPON SELECTION

1. **Stanga S.** “Aconitase as a marker of early pathological state in SMA: data from spinal cord and fibroblasts”, 4th Scientific International congress on spinal muscular atrophy, **SMA Europe**, 14-16 March 2024, Ghent (Belgium);
2. **Stanga S.** “APP-dependent regulation of GDNF expression controls neuromuscular junctions formation”. The immune-brain axis: from molecules to behavior, **University of Hasselt**, Belgium, March 12th and 13th, 2015;
3. **Stanga S.** “APP-dependent GDNF gene expression drives neuromuscular junction formation”. **XXVIII GISN 2018** (Gruppo Italiano per lo Studio della Neuromorfologia) meeting, Firenze, Italy, 30.11-1.12.2018;
4. **Stanga S**, Pavarino G, Monteleone F, Pergolizzi B, Vercelli A, Boido M. “Mitochondrial Morpho-functional Dysfunctions In Spinal Muscular Atrophy: Focus On Aconitase2” **93[^] SIBS 2021** (Gruppo Italiano per lo Studio della Neuromorfologia) online meeting (Palermo), 22-25.04.2021;
5. **Stanga S**, Pavarino G, Monteleone F, Pergolizzi B, Boido M, Vercelli A. “Mitochondrial Alterations In Spinal Muscular Atrophy” **XXX GISN 2020** (Gruppo Italiano per lo Studio della Neuromorfologia) online meeting (Torino), 12-14.11.2020;

SEMINARS

1. **Stanga S.** "Brain iron dyshomeostasis: a red thread across aging and neurodegenerative diseases", CEMO monthly seminar, March 12th 2024, **Institute of Neuroscience (IoNS), Université catholique de Louvain (UCLouvain)**, Bruxelles, Belgium;
2. **Stanga S.** “Brain iron dyshomeostasis and mitochondrial alterations as red thread across aging and neurodegenerative diseases “, November 16th 2023, **Cedars-Sinai seminars, Los Angeles, USA.**
3. **Stanga S.** “In pursuit of healthy brain aging: unveiling the biology of novel age-related mechanisms leading to dementia”, **The European Medical Students’ Association (EMSA)-Turin**, San Luigi, Orbassano, 26/06/2023;
4. **Stanga S.** “Methods and tools for the quantitative analysis of mitochondrial morphology and network in tissue and cells”, **online Webinar, Amici della Morfologia**, 06/05/23;
5. **Stanga S.** “Brain iron dyshomeostasis: a red thread across aging and neurodegenerative diseases”. Seminar at Development and Neuropharmacology Research Team, Center for Interdisciplinary Research in Biology, **College de France seminars**, Paris, 30/03/23;
6. **Stanga S**, Caretto A, Boido M, Vercelli A. “Mitochondrial dysfunctions are the early event eliciting the shift towards pathological neurobiological processes” **Morfologia e dintorni**, 3° incontro Nazionale, Dip. di Neuroscienze, Torino, Italy 26.09.2020;
7. **Stanga S.** “Mitochondrial dysfunctions and mitophagy in Spinal Muscular Atrophy” **Morfologia e dintorni**, 2° incontro Nazionale, Dip. di Neuroscienze, Torino, Italy 22-23.02.2020;
8. **Stanga S.** “Meccanismi di morte neuronale nell’Atrofia Muscolare Spinale” **Giornate del Dipartimento**, Dip. di Neuroscienze, Torino, Italy, 12-14.12.2019;
9. **Stanga S.** “The crucial role of mitochondria in neurodegenerative diseases: focus on Alzheimer’s disease and Spinal Muscular Atrophy” Metabolism meeting, **Molecular and Biotechnology Center MBC**, Torino, Italy, 12.11.2019;

10. **Stanga S.** “APP and Presenilins: physiological function and role in neurodegenerative and neuromuscular diseases”. **Neuroscience Institute Cavalieri Ottolenghi (NICO), University of Turin, Italy** 18.05.2018;
11. **Stanga S.** “APP and Presenilin: functions and role in neurodegenerative and neuromuscular diseases”. Department of Biology and Biotechnology “Lazzaro Spallanzani”, **University of Pavia, Italy** 14/09/2017;
12. **Stanga S.** “Control of GDNF expression by AD-related proteins and implications in neurodegenerative and neuromuscular diseases”. IoNS PhD & Postdoc day, **Université catholique of Louvain, Brussels, Belgium** 9/11/2016;
13. **Stanga S.** “AD-related proteins biological functions” **École polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland** 1st September 2016;
14. **Stanga S.** “Amyloid Precursor Protein regulation of GDNF expression controls neuromuscular junctions’ formation”. NEUROBRAINNET network, “Interuniversity Attraction Poles” (IAP), **University of Antwerp, Belgium, 03/10/2014;**
15. **Stanga S.** “APP-dependent regulation of GDNF expression and its involvement in neuromuscular junction”. NEUROBRAINNET network, “Interuniversity Attraction Poles” (IAP), **University of Antwerp, Belgium, 06/05/2013;**
16. **Stanga S.** “APP-dependent regulation of GDNF expression and its involvement in neuromuscular junction”. CEMO Seminar, IoNS, **Université catholique of Louvain, Brussels, Belgium** 16/04/2013;
17. **Stanga S.** “Regulation of the Glial-Derived Neurotrophic Factor (GDNF) expression by the Amyloid-Precursor Protein (APP)”. CEMO Seminar, IoNS, **Université catholique of Louvain, Brussels, Belgium** 20/03/2012.
18. **Stanga S.** “p53 and Alzheimer’s disease: from biological marker to molecular mechanism”, First Step in Research: Graduate Symposium, College A. Volta Pavia, **University of Pavia, Italy** 17/05/2010.

POSTERS AT CONGRESS

1. Mezzanotte M, Ammirata G, Boido M, Roetto A, **Stanga S.** “Activation of the hepcidin-ferroportin1 pathway in the brain and astrocytic-neuronal crosstalk to counteract iron dyshomeostasis during aging” **SIBS 2022, 6-9.04.22, Torino;**
2. **Stanga S,** Mezzanotte M, Ammirata G, Boido M, Roetto A. “Activation of the hepcidin-ferroportin1 pathway in the brain and astrocytic-neuronal crosstalk to counteract iron dyshomeostasis during aging” **FENS 2022, 9-13.06.22 Paris, France;**
3. Mezzanotte M, Ammirata G, Boido M, Roetto A, **Stanga S.** Brain Iron Deposits During Aging: Activation Of The Hpc/fpn1 Pathway. **31st National Conference of the Italian Group for the Study of Neuromorphology “Gruppo Italiano per lo Studio della Neuromorfologia” G.I.S.N. Milano, November 26-27, 2021. EHJ, 2021 ISSN 1121-760X, volume 65/ supplement 3;**
4. **Stanga S,** Contino S, Vranx C, Conrad L, Muccioli GG, Tyteca D and Kienlen-Campard P. “Presenilins γ -secretase independent functions: role of PS2 in cellular bioenergetic and lipid metabolism maintenance”, **BraYn congress, Pisa (Italy) 20-22/10/2021;**
5. **Stanga S.** “Mitochondrial dysfunctions and mitophagy in Spinal Muscular Atrophy” **Secondo Incontro Nazionale Morfologia e dintorni, Dip. Di Neuroscienze, Torino, Italy, 22-23.02.2020;**
6. **Boido M,** Stanga S, Pasini G, Pergolizzi B, Vercelli A. “Mitochondrial Dysfunction In Spinal Muscular Atrophy” **2nd International Scientific & Clinical Congress on Spinal Muscular Atrophy, Evry Genocentre, France, February 5th to 7th 2020;**
7. **Stanga S,** Pasini G, Pergolizzi B, Mezzanotte M, Roetto A, Boido M, Vercelli A; “Mitochondrial dysfunction: a new biomarker candidate for Spinal Muscular Atrophy?”. **2nd BraYn - Brainstorming Research Assembly for Young Neuroscientists, Milano 14-16/11/2019.**

8. **Stanga S**, Pasini G, Pergolizzi B, Boido M, Vercelli A; “Mitochondrial dysfunction in Spinal Muscular Atrophy”. 18th National Congress of the Italian Society for Neuroscience, **SINS 2019**, Perugia 26-29/09/2019.
9. **Stanga S**, Tasiaux B, Dewachter I, Octave JN and Kienlen-Campard P; “Control of GDNF expression by AD-related proteins and implications in neurodegenerative and neuromuscular diseases”. 13th International Conference on Alzheimer's and Parkinson's Diseases and Related Neurological Disorders, **AD/PD™ 2017**, Vienna, Austria, 29/03-2/04-2017.
10. **Stanga S**, Tasiaux B, Dewachter I, Octave JN, Kienlen-Campard P. “Control of GDNF expression by AD-related proteins and implications in neurodegenerative and neuromuscular diseases”. NEUROBRAINNET network, “Interuniversity Attraction Poles” (IAP), **University of Antwerp**, Belgium, 18/11/2016.
11. **Stanga S**, Tasiaux B, Dewachter I, Octave JN, Kienlen-Campard P. “Control of GDNF expression by AD-related proteins and implications in neurodegenerative and neuromuscular diseases”. **Belgian Brain Congress**, Mons, Belgium, 8/10/2016.
12. **Stanga S**, Tasiaux B, Dewachter I, Octave JN, Kienlen-Campard P. “Control of GDNF expression by AD-related proteins and implications in neurodegenerative and neuromuscular diseases”. **The Brain Mosaic congress**, Leuven, Belgium, 22-23/09/2016.
13. **Stanga S**, Zanou N, Audouard E, Tasiaux B, Contino S, Clotman F, Gailly P, Dewachter I, Octave JN, Kienlen-Campard P. “APP regulates the Glial cell line-Derived Neurotrophic Factor (GDNF) gene expression driving functional neuromuscular junctions formation”. 45th Annual Meeting **Neuroscience 2015**, Chicago, Illinois (USA), 17-21 October, 2015.
14. **Stanga S**, Zanou N, Audouard E, Tasiaux B, Contino S, Clotman F, Gailly P, Dewachter I, Octave JN, Kienlen-Campard P. “Amyloid precursor protein regulation of GDNF expression controls neuromuscular junctions formation”. 12th **International Conference on Alzheimer's and Parkinson's Diseases**, Nice, France, 18-22/03/2015.
15. **Stanga S**, Zanou N, Audouard E, Tasiaux B, Contino S, Clotman F, Gailly P, Dewachter I, Octave JN, Kienlen-Campard P. “APP-dependent regulation of gdnf expression and its involvement in neuromuscular junction”. The 11th **International Conference on Alzheimer's and Parkinson's Diseases**, AD/PD™, Florence, Italy 6-10 March, 2013.
16. **Stanga S**, Racchi M, Uberti D, Mazzini G, Sinforiani E, Memo M, Govoni S, Lanni C. “Conformationally altered p53: a potential predictive marker from MCI to Alzheimer’s disease?” **Italian Society of Pharmacology (SIF)**: “III Monothematic Conference: Alzheimer's disease by clinical complexity to rational therapy”, Pavia 11/06/2010.
17. **Stanga S**, Racchi M, Uberti D, Mazzini G, Sinforiani E, Memo M, Govoni S, Lanni C. “Conformationally altered p53: a potential predictive marker from MCI to Alzheimer’s disease?” Project: **Young Researcher of the Lombardy Region** "From Materials Science to Biomedicine", Pavia (Italy) 17/11/2009.
18. **Stanga S**, Lanni C, Uberti D, Mazzini G, Sinforiani E, Memo M, Govoni S, Racchi M. “Conformationally altered p53: a potential predictive marker from MCI to Alzheimer’s disease?” 34th **Italian Society of Pharmacology (SIF)**, Rimini (Italy) 14-17/11/2009.
19. Lanni C, **Stanga S**, Uberti D, Mazzini G, Sinforiani E, Govoni S, Memo M, Racchi M. “Conformationally altered p53: a potential predictive marker from MCI to Alzheimer’s disease?” **ICAD 2009**, Wien 11-16/07/2009.

POSITIONS OF RESPONSABILITY AND PUBLIC ENGAGEMENT

ACADEMIC ROLES:

2023/2024- present: Member of the Professor of the

PhD School in Neuroscience of the University of Turin (Collegio docenti del dottorato dal titolo NEUROSCIENZE (ciclo XXXIX) gestito dall'ufficio dottorati della Università TORINO)

2022/2023- present: Member of the Commissione di gestione dell'Assicurazione della Qualità of the Dep. Of Neuroscience (Delibere n 138 - 139 del Consiglio di Dipartimento del 16 maggio 2023 -- Verbali gruppo qualità da inserire nel CDD del 16 maggio 2023)

2021-2024: Member of the Giunta of the Dep. Of Neuroscience (University of Turin)

2021-2023: Member of the group working on Quality of the Dep. Of Neuroscience (University of Turin), group Director: Professor Paola Rocca

2016 – July 2018: Member of “Corps scientifique” (CORSI) (UCLouvain)

2013 – July 2018: Animal Welfare Responsible for the Federal Public Service Health, Food Chain Safety and Environment, Bruxelles, Belgium. I am responsible for the animal welfare for the peripheral animal house of the Alzheimer group (Pr. Jean-Noël Octave, Pr. Pascal Kienlen-Campard and Pr. Ilse Dewachter) at the Université catholique de Louvain, IoNS, Brussels (Belgium)

2011 – 2016: Organizational Committee Member of the PhD and Postdoc Day, Université catholique de Louvain, IoNS, Brussels (Belgium). The program includes talks, round table discussions and posters presentations. I was responsible for: acquisition and management of sponsors; acquisition of speakers and moderation during the symposium; organization of the Poster Presentation session; Job Board organization

2007 - 2011: Executive Committee Member and President of the Association of Italian Ph.D. Students (ADI-Pavia), Università degli Studi di Pavia, Italy. Since 2007 I have been a member of the Executive Committee and from 2009 to 2011 I have been the President of the Association. ADI-Pavia represents Ph.D. students and Postdocs in the University and promotes their professional figure with the public administration and private enterprises by organizing interactive social, academic and career oriented events.

CONGRESS COMMITTEE MEMBER/ORGANIZER:

2023: Organization of the symposium entitled “In pursuit of healthy brain aging: unveiling the biology of age-related mechanisms leading to dementia” held during the 20th **National SINS congress** in Turin 14-17.09.2023

2023: Organizational Committee Member of the 20th SINS Congress 2023, 14-17.09.2023 Turin, Italy;

2019 – present: Organizational Committee Member of the Conference on “Motor neuron diseases: understanding the pathogenetic mechanisms to develop therapies”, Dip. Di Neuroscienze, Torino, first edition 6-7.11.2020, second edition 4-5.11.2022, third edition will be 8-9.11.2024

2022: Scientific Committee Member of the 94° meeting of the SIBS: Società Italiana di Biologia Sperimentale, Torino, 6-9.04.2022

2022: Participation to the Pint of Science 2022 as speaker: “Braccio di ferro col Cervello”, 10.05.22 Birrificio Torino

2021: Organizational support for the organization of the “**IBRO-PERC Support for Soft Skills Training** Building up a career in Neuroscience Grant and CV writing + job interview preparation” proposed by the director of NICO - University of Turin Prof. A. Vercelli; November 29th - December 4th 2021, online

2020: Organizational Committee Member of the “Secondo Incontro Nazionale Morfologia e dintorni”, Dip. Di Neuroscienze, Torino, Italy, 22-23.02.2020

2019: Support in the organization and development of the ‘Alternanza scuola-lavoro’, NICO, Orbassano (TO), Italy, 11-21.06.2019 and of the ‘Porte Aperte @NICO’, NICO, Orbassano, Torino, Italy, 11.05.2019

2019: Support in the organization and development of the ‘Olimpiadi delle Neuroscienze’ fase regionale, Dip. Di Neuroscienze, Torino, Italy, 16.03.2019

EVALUATOR - REVIEW EDITOR:

2024: Evaluator/Scientific Expert for the JNTP-EU 2024

2024: External expert for the European Commission, Evaluations HORIZON MSCA 2023-DN-01

2023: External expert for the European Commission, Evaluations HORIZON MSCA 2022-DN-01

2023 – present: Review Editor for the Cellular and Molecular Life Sciences

2022: Evaluator/Scientific Expert for the JNTP-EU 2022

2022: Evaluator/Scientific Expert for the AAPG 2022 for the scientific panel Interfaces: mathématiques, sciences du numérique –biologie, santé.

2022: External expert for the European Commission, Evaluations HORIZON-MSCA-2021-DN-01-01

2021- present: Review Editor for Scientific Reports

2020: External expert for the European Commission, Evaluations for H2020-MSCA-ITN-2020

2020 – present: Review Editor for the International Journal of Molecular Sciences

2018 – present: Review Editor for Neurobiology of Disease, Frontiers in Neuroscience, Frontiers in Neurology, Frontiers in Psychiatry

2017: External expert for the European Commission, Evaluations for H2020-NMBP-CSA-2017

SOCIETIES MEMBERSHIPS:

2023 – present: Member of the SOCIETA' ITALIANA DI ANATOMIA (SIAI)

2021- present: Member of the Neuroscience Institute Turin (NIT)

2021 – present: Member of the Società Italiana di Biologia Sperimentale (SIBS)

2019 – present: Member of the Società Italiana di Neuroscienze (SINS)

2018 – present: Member of the Gruppo Italiano per lo Studio della Neuromorfologia (GISN)

2015 - present: Member of the Society for Neuroscience (SfN)

TECHNICAL SKILLS

Biochemical techniques: DNA and RNA extraction and dosage, SDS-PAGE and Western Blot, Immunoprecipitation, Mitochondria isolation from tissues and cells, 2DE-MALDI. **Cell biology techniques:** Cell culture (Fibroblasts, HEK, SH-SY5Y, NG108-15, C2C12, IMR, nerve-muscle co-cultures), iPSCs-derived human cortical neurons and spinal motor neurons, Cell viability assay (MTT, LDH), Cell transfection, Mitochondria extraction from cells and tissues, Immunocytochemistry and Immunohistochemistry, Confocal microscopy, Cytofluorimetric analysis (FACS), ELISA, ECLIA. **Molecular biology techniques:** Classical PCR, RT-PCR, real-time PCR, Luciferase reporter assay. **Mouse handling:** Mouse breeding, genotyping, basic behavioral tests, mouse primary cell culture (neurons, astrocytes, fibroblasts and myoblasts), nerve-muscle primary co-cultures, mouse spinal cord isolation. **Biocatalysis techniques:** Use of free and immobilized enzyme in the synthesis of compounds of pharmaceutical interest, Spectrophotometer, High Performance Liquid Chromatography (HPLC), pH STAT. **Specific softwares:** Office Pack, CS-ChemDraw Ultra, SciFinder Scholar (Bibliographic Search online), Multi Manager HSM HPLC Merck-Hitachi D-7000, WinMDI, Scion Image, GraphPad Prism, Bio-Rad iQ5, FV10-ASW 3.1 Viewer, Image J, MiNA. Award of the European license, at the School 2F, for "Electronic and Computer Operator and Programmer" (July 2002).

ACTIVE SCIENTIFIC COLLABORATIONS

INTERNATIONAL: Pr. Pascal KIENLEN-CAMPARD, Institute of Neuroscience, UCLouvain, Belgium; Dr. Françoise Piguet, Institut National de la Santé et de la Recherche Médicale (INSERM); Dr. Ariel Di Nardo and

Pr. Alain Prochiantz Collège de France, Paris; Pr. Ana Clara Cristovao, Universidade da Beira Interior Faculdade de Ciências da Saúde: Covilha, Castelo Branco, Pr. Clive Svendsen, Cedars-Sinai, Los Angeles, CA, USA.

NATIONAL: Pr. Federico FORNERIS, Università degli Studi di Pavia; Pr. Paolo PORPORATO, MBC, Università degli Studi di Torino; Dr. Cristina PANUZZO, Università degli Studi di Torino; Dr. Barbara PERGOLIZZI, Università degli Studi di Torino; Prof. Andrea GRAZIANI, Università degli Studi di Torino, Pr. Elisabetta MARINI, Università degli Studi di Torino, Pr. Fabio Penna and Pr. Paola Costelli, Università degli Studi di Torino.

Turin, July 2024

Serena Stanga