DANIELA STROBBE

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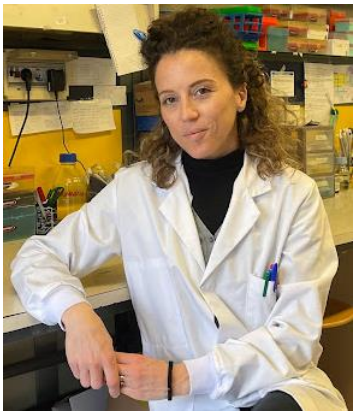
EDUCATIONS

✓ **1st Level Master Course "La Nutrizione" | Pegaso Online University**
NOV 2018 – APRIL 2020



✓ **Biologist Government Licensing Examination| University of Tor Vergata**
NOV 2016 – JAN 2017

✓ **PhD in Cellular and Molecular Pharmacology| University of Padova**
FEB 2011 – MAR 2014
"Mitochondrial DNA haplogroup-dependence of drugs and xenobiotics toxicity"
The study was concerned with mitochondrial genetics and biochemistry investigating the impact of mitochondrial DNA (mtDNA) common variation on mitochondrial functions.

✓ **Master's Degree in Medical Biotechnology | University of Bologna**
OCT 2007 – MAR 2010
"Analysis of penetrance of mutations in OPA1 gene in Dominant Optic Atrophy".
The study was concerned with variability of penetrance in mitochondrial neurodegenerative diseases.

✓ **Bachelor's Degree in Biotechnology | University of Bologna**
OCT 2004 – MAR 2007
"Hsp70 and cFos in the nervous system of rat during the modification of the wake-sleep cycle at low temperatures".
The study was concerned with the study of wake-sleep cycle in rats.

WORK EXPERIENCES

✓ **Nutritionist**
SEPT 2018 – ONGOING
- **Poliambulatorio Più Salute**
  Via Vittorio Veneto n30, 64011 Alba Adriatica (TE)
- **AG LOFT Exclusive Fitness**
  Viale di Porta Tiburtina 44-48, 00185 Roma

✓ **Post Doc Researcher Assistant |**

- **PRIN: PROGETTI DI RICERCA DI RILEVANTE INTERESSE INTERNAZIONALE.**

"*The interplay between Nucleus Associated Mitochondria (NA) and Autophagy in neuronal homeostasis: a cell biology study"***.**

Principal Investigator: Michelangelo Campanella

University of Rome "La Sapienza".

MAR 2024 – ON GOING

✓ **Tutor and Examiner| Degree Course in Farmacy.**

"*Mitochondrial Driven Mechanisms of Therapy Resistance", Course Program: Mitochondrial Driven Mechanisms of Therapy Resistance***.**

University of Rome Tor Vergata.

JAN 2019 – APR 2023

✓ **Post Doc Researcher Assistant |**

- **Post doctoral felloship Fondazione Umberto Veronesi.**

"*Inform aggressive cancer via the mitochondrial contact sites with the nucleus".*

University of Rome Tor Vergata.

FEB 2023 – FEB 2024

Explore the role of the mitochondrial 18kDa translocator protein (TSPO) in glioblastoma cell lines, with a specific focus on its role in cholesterol transport and nucleus associated mitochondria (NAM)

- **My First AIRC Grant 2018.**

"*Revealing Form and Function of CRIMNL in Breast Cancer"***.**

Principal Investigator: Michelangelo Campanella

University of Rome Tor Vergata.

AUG 2017 – JAN 2023

Investigate the role and impact of the mitochondrial 18kDa translocator protein (TSPO) on mitochondrial retrograde signalling in the context of breast cancer.

- **Ministry of Health of Italy.**

"*The 18kDa Protein TSPO is a VDAC Dependent Pathway for Metabolic Re-adaptation and Mitophagy Evasion in Glioblastoma".*

Principal Investigator: Michelangelo Campanella

"Regina Elena" National Cancer Institute.

JAN 2015 – JULY 2017

Study the molecular mechanism of mitophagy in brain tumours, specifically neuroblastoma and glioblastoma cellular lines, using animal and cellular models.

- **EBRI, Rita Levi Montalcini Foundation – Programme Grant**

Metabolism in Brain Diseases.

Principal Investigator: Michelangelo Campanella

European Research Institute (EBRI).

MAY 2014 – OCTOBER 2014

Regulation of mitochondrial enzymes in the pathogenesis of neuronal death.

✓ **Fellowship |**

- **PRIN 2008**.

"*Fattori genetici ed aspetti clinico-funzionali della Narcolessia*". Coordinatore nazionale progetto: Giuseppe Plazzi.

University of Bologna

MAY 2010 – OCT 2010

The study concerned with the possible association between mitochondrial DNA variability and Narcolepsy.

✓ **Apprenticeship |**

VU Medical Centre, Amsterdam

APR 2007 – OCT 2007

The study concerned with the role of thymidine phosphorylase (TP) in the migration of tumour cells.

✓ **Visiting Researcher Scientist, I**

Helmholtz Zentrum, München

AUG 2019 – SEPT 2019

Placement Project: Mitochondrial Retrograde Response (MRR) to the nucleus in different type of cancer cell lines.

SKILLS

- Foreign language: English C1
- Strong background in the cellular and molecular Biology, Biochemistry and Pharmacology
- Ability to work in a team or independently and to adapt to multicultural environment.
- Good command of Microsoft office tools and statistical programs
- Basic knowledge of graphic design application and computer skills related to database searching.
- Discipline-specific conceptual knowledge (design of scientifically testable hypotheses, broad based and cross-disciplinary knowledge acquisition, knowledge of specific research area)
- Research skill development (research techniques and laboratory safety, experimental design, data analysis and interpretation, effective search strategies and critical evaluation of the literature, grant application and scientific publishing processes)
- Communication skills (writing, speaking, teaching, and mentoring)
- Leadership and management skills (personnel management, leadership skills, project management)
- Responsible conduct of research

Throughout my professional experience, I have acquired a diverse range of skills, including:

- performing rat Perfusion and mouse CO2 euthanasia, and cutting rat cerebral section, isolating mouse internal organs (brain, liver, spleen, and bone) for IHC molecular and histopathological studies.
- cell culture (encompassing cell viability assessments), western blotting and Co-IP techniques. Bacterial transformation, cellular transfection, IF staining, and proteostasis (autophagy).
- DNA extraction from cells and blood, along with PCR, sequence analysis, and RFLP (Restriction Fragment Length Polymorphism).
- generating trans-mitochondrial cytoplasmic hybrids (cybrids) and conducting DNA

quantification, quantitative real-time PCR, and spectrophotometric assays for respiratory complexes (determining cellular ATP levels and synthesis).

COURSES

Corso "Intolleranze e Allergie: dalla diagnosi alla terapia"| Scuola Nutrizione Salernitana
2023

Corso "Gestire la magrezza: malnutrizione e disturbi alimentari"|Scuola Nutrizione Salernitana
2023

Corso "Gravidanza e allattamento" | Scuola Nutrizione Salernitana
2023

Esercitazioni e pratiche di alimentazione per lo sportivo| Istituto di Alta Formazione (IAF)
JUN 2018, ROMA

Advanced training course in forensic science and criminology| AISF/CSI Academy
OCT 2016 – MAY 2017, ROMA

Theoretical and practical course on the use of Image J| University of TorVergata
12 MAY 2016, ROMA

CONFERENCES

Poster Session| Euromit2023
JUN 11-15, 2023; BOLOGNA
Daniela Strobbe, Mardja Bueno, Claudia De Vitis, Danilo Faccenda, Krenare Bruqi, Elena Romano, Gurtej K Dhoot, Ivi J Bistrot, Fabio Klamt, Luana S. Lenz, Eduardo Cremonese Filippi–Chiela, Pietro Ivo D'Urso, Imogen Lally, Laura Falasca, Rita Mancini, Federico Roncaroli, Guido Lenz and Michelangelo Campanella, "*Nucleus Associated Mitochondria (NAM) drive a cholesterol-mediated mechanism of Temozolomide resistance in glioblastoma cells"*

Poster Session| 7th International Myology Congress and mitoNice 2022
SEPT 15-17, 2022; NICE
Caporali L, Moresco M, Pizza F, La Morgia C, Fiorini C, Strobbe D, Zenesini C, Hooshiar Kashani B, Torroni A, Pagotto U, Carelli V, Plazzi G. "*The role of mtDNA haplogroups on metabolic features in narcolepsy type 1"*

Poster Session| International Scientific Advisory Board (ISAB) – "Regina Elena" National Cancer Institute
NOV 15, 2018; ROMA
Daniela Strobbe. Caterina Ferraina, Guido Lenz, Rita Mancini and Michelangelo Campanella. *"Impaired mitochondrial quality control induces temozoloide treatment resistance through the 18kDa protein TSPO"*

Poster Session| 5th World Congress on Targeting Mitochondria
OCT 29-31 2014, BERLIN
Giordano Luca, Ghelli Anna, Petrosillo Giuseppe, Fracasso Flavio, Del Dotto Valentina, Strobbe Daniela, Loguercio Polosa Paola, Roberti Marina, Deceglie Stefania, Ciaravolo Stefano, D'Adamo Pio, Carelli Valerio, Cantatore Palmiro. *"Cigarette smoking sharpens mitochondrial dysfunction in LHON fibroblasts promoting penetrance disease"*

Training seminar | Institute of Neurological Sciences of the Italian National Research Council (IRCCS)
MAR 19, 2013; BOLOGNA
"Cybrids, a versatile cellular model to study the mitochondrial and nuclear genome and the interaction with the environment in neurology"

Poster Session| 5th National Congress of the Italian Society of Pharmacology
14-17 SEPT 2011, BOLOGNA
Strobbe D. *"Mitochondrial Pharmacogenomics: How does the mitochondrion react*

PUBLICATIONS

- **Daniela Strobbe**, Mardja Bueno, Claudia De Vitis, Danilo Faccenda, Krenare Bruqi, Lucia Pedace, Elena Romano, Gurtej K Dhoot, Andrey A. Yurchenko, Ivi J Bistrot, Fabio Klamt, Luana S. Lenz, Eduardo Cremonese Filippi–Chiela, Pietro Ivo D'Urso, Imogen Lally, Eveline Miele, Laura Falasca, Sergey Nikolaev, Rita Mancini, Federico Roncaroli, Guido Lenz and Michelangelo Campanella. Nucleus Associated Mitochondria (NAM) drive a cholesterol-mediated mechanism of Temozolomide resistance in glioblastoma cells. Neuro-Oncology. *Under revision*
- Caporali L, Moresco M, Pizza F, La Morgia C, Fiorini C, **Strobbe D**, Zenesini C, Hooshiar Kashani B, Torroni A, Pagotto U, Carelli V, Plazzi G. The role of mtDNA haplogroups on metabolic features in narcolepsy type 1. Mitochondrion. 2022 Jan 17;63:37-42. doi: 10.1016/j.mito.2022.01.005.
- Singh A, **Strobbe D**, Campanella M. Pyroptosis targeting via mitochondria: An educated guess to innovate COVID-19 therapies. Br J Pharmacol. 2021 Oct 10. doi: 10.1111/bph.15670.
- PMID: 34632567Michele Frison, Danilo Faccenda, Rosella Abeti, Manuel Rigon, **Daniela Strobbe**, Britannie S England-Rendon, Diana Cash, Katy Barnes, Mona Sadeghian, Marija Sajic, Lisa A Wells, Dong Xia, Paola Giunti, Kenneth Smith, Heather Mortiboys, Federico E Turkheimer, Michelangelo Campanella. The translocator protein (TSPO) is prodromal to mitophagy loss in neurotoxicity. Mol Psychiatry. 2021 Mar 4. doi: 10.1038/s41380-021-01050-z.
- **Daniela Strobbe**, Soumya Sharma, Michelangelo Campanella. Links between mitochondrial retrograde response and mitophagy in pathogenic cell signalling. Cell Mol Life Sci. 2021 Feb 23. doi: 10.1007/s00018-021-03770-5.
- **Daniela Strobbe**, Rosalba Pecorari, Oriana Conte, Antonella Minutolo, Christine M M Hendriks, Stefan Wiezorek, Danilo Faccenda, Rosella Abeti, Carla Montesano, Carsten Bolm, Michelangelo Campanella. NH-sulfoximine: A novel pharmacological inhibitor of the mitochondrial F_1Fo-ATPase, which suppresses viability of cancerous cells. *Br J Pharmacol*. 2021 Jan;178(2):298-311. doi: 10.1111/bph.15279. Epub 2020 Dec 14.
- Di Rita A, Peschiaroli A, Dacunzo P, **Strobbe D**, Hu Z, Gruber J, Nygaard M, Lambrughi M, Melino G, Papaleo E, Dengjel J, El Alaoui S, Campanella M, DotschV, Rogoc VV, Strapazzon F, Cecconi F. HUWE1 E3 ligase promotes PINK1/PARKIN-independent mitophagy by regulating AMBRA1 activation via IKKα. *Nat Commun*. 2018 Sep 14; 9(1):3755. doi: 10.1038/s41467-018-05722-3.
- Rebeca Martín-Jiménez, Danilo Faccenda, Emma Allen, Holly Beatrice Reichel, Laura Arcos, Caterina Ferraina, **Daniela Strobbe**, Claire Russell and Michelangelo Campanella. Reduction of the ATPase inhibitory factor 1 (IF1) leads to visual impairment in vertebrates. *Cell Death Dis*. 2018 Jun 4; 9(6):669. doi: 10.1038/s41419-018-0578-x.
- **Strobbe D**, Campanella M. Anxiolytic Therapy: A Paradigm of Successful Mitochondrial Pharmacology. *Trends Pharmacol* Sci. 2018 Mar 30. pii: S0165-6147(18)30046-4. doi: 10.1016/j.tips.2018.02.008.
- **Strobbe D**, Robinson AA, Harvey Y, Rossi L, Ferraina C, de Biase V, Rodolfo C, Harvey RI, Campanella M. Distinct Mechanisms of Pathogenic DJ-1 Mutations in

Mitochondrial Quality Control. *Front Mol Neurosci*. 2018 Mar 15; 11:68. doi: 10.3389/fnmol.2018.00068.

- **Strobbe D**, Caporali L, Iommarini L, Maresca A, Montopoli M, Martinuzzi A, Achilli A, Olivieri A, Torroni A, Carelli V, Ghelli A.Haplogroup J mitogenomes are the most sensitive to the pesticide rotenone: Relevance for human diseases. *Neurobiol Dis*. 2018 Feb 24; 114:129-139. doi: 10.1016/j.nbd.2018.02.010.
- I Matic, **D. Strobbe**, F Di Guglielmo, M Campanella. Molecular Biology Digest of Cell Mitophagy. *IRCMB*, 2017 Volume 332: AID 131
- Matic I*, **Strobbe D***, Frison F, Campanella M. Controlled and impaired Mitochondrial Quality in neurons: Molecular Physiology and Prospective Pharmacology. *Pharmacol Res*. 2015, Apr 23. pii: S1043-6618(15)00060-2. doi: 10.1016/j.phrs.2015.03.021.
- Manners DN, Rizzo G, La Morgia C, Tonon C, Testa C, Barboni P, Malucelli E, Valentino ML, Caporali L, **Strobbe D**, Carelli V, Lodi R. Diffusion Tensor Imaging Mapping of Brain White Matter. Pathology in Mitochondrial Optic Neuropathies. *AJNR Am J Neuroradiol*. 2015, Mar 19.
- Maresca A, Caporali L, **Strobbe D**, Zanna C, Malavolta D, La Morgia C, Valentino ML, Carelli V. Genetic Basis of Mitochondrial Optic Neuropathies. *Curr. Mol Med*. 2014, 14: 985-992

I authorize the processing of personal data in accordance with the law (art. 7 of Legislative Decree No. 196 of 30.6.2003)