

CURRICULUM VITAE

Elena Silvestri PhD

Education

- July 1999, Master Degree in Biology cum laude, University of Sannio, Benevento, Italy
- June-December 2000, Summer Student at the Basel Institute for Immunology, Basel, Switzerland
- May 2000 - October 2003, PhD in Environmental and Life Sciences, University of Sannio, Benevento, Italy.
- September 2-8 2001- Advanced FEBS Course: “Mitochondria in the cell life and death”, Moscow State University, Mosca, Russia.
- November 11-15 2002 – Course of “Proteome Analysis”, Fondazione per le Biotecnologie, Colleretto Giacosa, Ivrea (TO), Italy
- February 5-7 2003 - Course of “Two-dimensional gel electrophoresis ”, Fondazione per le Biotecnologie, Colleretto Giacosa, Ivrea (TO), Italy

Research activity: a) peripheral mediators of thyroid hormone action: diiodothyronines; b) mitochondria and cellular thermogenesis; c) thyroid hormones and uncoupling proteins; d) proteomic profiles of metabolically active animal tissues under physio-pathological conditions (thyroid states, obesity, diabetes, ageing, AD).

Prof. Silvestri is author of 88 publications on impacted international journals, h-index 31, citations 2979 (Scopus 2025, <https://www.scopus.com/authid/detail.uri?authorId=20135958500>).

a) Organization or participation as a speaker at scientific conferences in Italy or abroad

Prof. Silvestri was invited speaker at:

- **University of Coimbra, Portugal, PDBEB Courses 2024/2025,**
"ONE HEALTH: A Metabolic Approach from the Cell to Society.
Hosts: Paulo J. Oliveira & Anabela Marisa Azul & Paula I. Moreira & João O. Malva
May 14, 2025, title of the presentation: *“Mitochondria and fatty liver: physiological-pathological insights and hormonal-nutritional interventions”*
- **University of Coimbra, Portugal, PDBEB Courses 2021/2022,**
"ONE HEALTH and the Metabolism-Disease-Environment Triangle:
When Biomedicine meets Innovation, Science Outreach and Social Sciences", March 7 - 11, 2022
Hosts: Paulo Oliveira, Anabela Marisa Azul.
March 9, 2022, title of the presentation: *“Thyroid hormone analogues and derivatives: Actions in fatty liver”*
- **University of Coimbra, Portugal, PDBEB Courses 2021/2022,**
"ONE HEALTH and the Metabolism-Disease-Environment Triangle:
When Biomedicine meets Innovation, Science Outreach and Social Sciences", March 7 - 11, 2022
Hosts: Paulo Oliveira, Anabela Marisa Azul.

March 9, 2022, title of the presentation: *“Thyroid hormones and the mitochondrial respiratory chain – a focus on respiratory supercomplexes and mitochondrial dynamics”*

-University of Coimbra, Portugal, CNC Seminars 2022,

Host: Paulo Oliveira, CNC

March 11, 2022, title of the seminar: *“Pax8 and Nkx2-1 haploinsufficiencies differentially affect liver metabolic pathways”*.

- University of Coimbra, Portugal, PDBEB Courses 2021/2022,

Proteomics Approaches in Life Sciences – May 2-6, 2022

Host(s): Bruno Manadas (bmanadas@cnc.uc.pt), Isaura Simões (isimoes@biocant.pt) and Sandra Anjo (sandra.isabel.anjo@gmail.com)

May 4, 2022, title of the presentation: *“Proteomic approaches for the study of tissue specific effects of 3,5,3'-triiodo-L-thyronine and 3,5-diiodo-L-thyronine in conditions of altered energy metabolism”*.

-University of Naples Federico II, “Seminari del Dipartimento di Biologia”

Host: Prof. Assunta Lombardi

May 31, 2022, title of the presentation: *Mitochondrial proteomics: a tool for the study of metabolism in health and diseases*.

- ICAP 2022, Analytical Proteomics 2022, July 18-20, Caparica, Portugal, *“Mitochondria, iodothyronines, and metabolic disorders: proteomic approaches”*.

- BioST 2022, World Biological Science and Technology Conference, 2022.7.20-22 / Osaka, Japan *“Adiposity, energy and substrate metabolism in diet-induced and genetic dysthyroidisms: tissue specific responses and mediators”*.

- “International Conference on Cell Science & Molecular Biology”, December 5-7, 2022 Rome, Italy, *“Iodothyronines and body adiposity: a focus on white adipose tissue”*.

-International Advances Molecular Biology Congress, Istanbul, Turkiye, September 18-21, 2022. *“Mitochondrial proteomics: a tool for the study of metabolism in health and diseases”*.

- WCDD-2022, 5th Annual Word Congress of Digestive Disease, Osaka, Japan, 2023. *“Iodothyronines, insulin sensitivity and adiposity: an inter-organ cross-talk? Studies on animal models of overweight”*.

- ICOE-2023, International Conference on Endocrinology, New recommendations and practical approaches in the treatment of endocrinal disorders, 23-24 January 2023, Virtual Conference. *“IN VIVO EVALUATION OF MEDITERRANEAN DIET EFFECTS ON CHRONIC KIDNEY DISEASE IN A DB/DB MOUSE MODEL OF TYPE 2 DIABETES”*.

Prof. Silvestri was Invited Lecturer at

University of Coimbra, MBCM, Mestrado em Biologia Celular e Molecular, DCV-UC, Aging Course, May 2- June 3, 2025, Coordinator and Lecturer: Emília Duarte (DCV-Department of Life Sciences, and CNC-Center for Neuroscience and Cell Biology, UC), May 13, 2025.

Lecture: Hormonal Regulation of Mitochondria in Sarcopenia: Mechanisms and Implications

University of Coimbra, MBCM, Mestrado em Biologia Celular e Molecular, DCV-UC, Aging Course, May 2- June 3, 2022, Coordinator and Lecturer: Emília Duarte (DCV-Department of Life Sciences, and CNC-Center for Neuroscience and Cell Biology, UC), May 12, 2022.

Lecture 1: The ageing skeletal muscle - Transcriptomic and proteomic profiles of rat ageing skeletal muscle: a study by a cDNA array, 2D- and Blue native-PAGE approach

Lecture 2: Ageing of the thyroid gland

Prof. Silvestri has attended several physiology and endocrinology congresses in Italy and abroad. She attended as **speaker** the following congresses:

- 2007 **European Thyroid Association**, September 1-5, Leipzig, Germany. 3,5-Diiodo-L-Thyronine-Induced Proteomic Changes in Liver Mitochondria from High Fat-fed Rats: Evidences from Two-Dimensional Electrophoresis. **Silvestri E**, Burrone L, Lombardi A, de Lange P, Farina P, Feola A, Lanni A, Goglia F, Moreno M.
- 2008 **Italian Proteomic Association**, 11-14 June, Selva di Fasano (Brindisi) Italy. 3,5-diiodo-L-thyronine-induced proteomic changes in mitochondria from fatty liver: evidences from two-dimensional and blue native electrophoresis. **Silvestri E**, Burrone L, Lombardi A, de Lange P, Lanni A, Goglia F, Moreno M.
- 2010 **61° Congresso Nazionale Società Italiana di Fisiologia**, 15-17 Settembre, Varese. High fat diet-induced insulin resistance: effects of 3,5-diiodo-L-thyronine on muscle mitochondrial proteome and function. **Silvestri E**, De Matteis R, de Lange P, Lombardi A, Glinni D, Cioffi F, Senese R, Lanni A, Goglia F, Moreno M.
- 2011 II International Congress on Analytical Proteomics, 18-20 July, Ourense, Spain. Effects of 3,5-Diiodo-L-Thyronine on High fat Diet-Induced Insulin-Resistance: Focus on Muscle Mitochondrial Phenotype. **Silvestri E**.

Prof. Silvestri was Member of the Organizer Committee of the 62° Congresso Nazionale SIF Sorrento • 2011

b) Direction or participation in the activities of a research group characterized by collaborations at national or international level

Prof. Silvestri directed the activities of an international research group, in collaboration with:

-Prof. Abdul Dulloo, Department of Medicine, Physiology, University of Fribourg, Fribourg, Switzerland.

-Prof. Robin Peeters, Department of Internal Medicine, Academic Center for Thyroid Diseases, Erasmus MC, Rotterdam, Netherlands, 01/06/2016 - 04/03/2021

(Front Endocrinol. 2021 Mar 4;12:631176. doi: 10.3389/fendo.2021.631176).

Prof. Silvestri directed the activities of a national research group, in collaboration with:

-Prof. Concetta Ambrosino, Biogem Scarl, Istituto di Ricerche Genetiche 'Gaetano Salvatore', Ariano Irpino, Italy;

-Prof. Mario De Felice, Institute of Experimental Endocrinology and Oncology (IEOS), CNR, Naples, Italy and Department of Molecular Medicine and Medical Biotechnologies, University of Naples Federico II, Naples, Italy, 01/01/2019 - 15/04/2022

(J Endocrinol. 2022 Apr 15;253(3):115-132. doi: 10.1530/JOE-22-0053).

Prof. Silvestri directed the activities of an international research group for the PhD project "Dottorati di Ricerca Innovativi a Caratterizzazione Industriale" - PON FSE FESR RI 2014/2020 - Interazione funzionale adipochine epatocchine nelle dismetabolie: modelli cellulari, biomarcatori e fattori endocrini.

CUP: F85B18006450006.

Partners:

- Autonomous University of Madrid (Thyroid Molecular Laboratory. Institute for Medical and Molecular Genetics (INGEMM), La Paz University Hospital), Supervisor: Prof. José C. Moreno.
- Ca.re.bios - Biogem- Campus Regi Biologia srl, Via Camporeale, Area PIP 83031 Ariano Irpino (AV), Tutor: D'Andrea Egildo Luca, PhD.

Prof. Silvestri participated the activities of an international research group, in collaboration with:

- Prof. Ira Goldberg, Department of Medicine, Columbia University New York, NY, USA;
- Dr. Joel R Ehrenkranz, Department of Medicine, Intermountain Healthcare Salt Lake City, UT, USA, 01/01/2014 - 17/11/2016.

(Front Physiol. 2016 Nov 17;7:545. doi: 10.3389/fphys.2016.00545).

Prof. Silvestri collaborates with:

- Dipartimento di Biologia, Università degli Studi di Napoli "Federico II", Complesso Universitario Monte Sant'Angelo, via Cinthia – Edificio 7, 80126 – Napoli, Italy;
- Dipartimento di Scienze e Tecnologie Ambientali, Biologiche e Farmaceutiche (DiSTABiF), Università degli studi della Campania Luigi Vanvitelli, Via Vivaldi 43, 81100 Caserta, Italy;
- Bioinformatics Lab, IRGS Istituto di Ricerche Genetiche G. Salvatore, c/o BioGeM s.c.a r.l., Ariano Irpino (AV), Italy;
- Laboratorio di Proteomica e Spettrometria di Massa, ISPAAM, Consiglio Nazionale delle Ricerche, Via Argine 1085, 80147 Napoli, Italy
- Dipartimento di Scienze Biomolecolari, Università di Urbino "Carlo Bo," Urbino, Italy
- Department of Internal Medicine, Erasmus MC, Rotterdam, The Netherlands
- Department of Medicine, Physiology, University of Fribourg, Fribourg, Switzerland
- Department of Medicine, Columbia University, New York, NY, USA
- Thyroid Molecular Laboratory, Institute for Medical and Molecular Genetics (INGEMM), La Paz University Hospital, Autonomous University of Madrid, Madrid, Spain.

c) Responsibility for scientific studies and research entrusted by qualified public or private institutions

Prof. Silvestri had the Scientific Responsibility of a University Research Grant: "ASPETTI FISIologici E VALUTAZIONE DELLE CONDIZIONI DI BENESSERE IN BOVINE DA LATTE ALLEVATE CON DIVERSE TECNICHE DI ALLEVAMENTO". Bio09, Physiology, September 16, 2019 – September 18, 2020. Funding: "SALUTE" Project, approved by ministerial decree number 36296 December 19, 2018.

Prof. Silvestri had the Scientific Responsibility of a Research Project funded by Lysitech Srl (Scientific Company and Research Organism) within the Agreement between Lysitech Srl and Department of Science and Technologies, University of Sannio, Benevento, March 10, 2020. Study title: "Studio su Dieta Mediterranea e Malattia Cronica Renale (CKD)". April 15, 2020 – December 31, 2020.

Prof. Silvestri had the Scientific Responsibility of a Research Project funded by Lysitech Srl (Scientific Company and Research Organism) within the Agreement between Lysitech Srl and Department of Science and Technologies, University of Sannio, Benevento, March 10, 2020. Study title: "Progettazione di un mangime sperimentale per roditori" nell'ambito dello Studio su Dieta Mediterranea e Malattia Cronica Renale (CKD)", mangime speciale realizzato poi da Mucedola Srl. April 2020 – September 2020.

d) Scientific responsibility for research projects and participation to projects admitted for funding on the basis of competitive calls based on peer review

Scientific Coordinators for:

- Nutraceutica, nutrigenomica e alimenti funzionali", ISTITUTO NEUROLOGICO MEDITERRANEO "NEUROMED S.p.A", Traiettoria 5, Azione 5.1, «Creazione di un programma di azione per la lotta alla malnutrizione in tutte le sue forme e per la diffusione dei principi della dieta mediterranea» - UOR UNISANNIO - OS2, Rete nazionale per lo studio dei meccanismi genetici, epigenetici e molecolari alla base dell'attività dei nutraceutici e degli alimenti funzionali. (2023-2026)
Codice Locale Progetto: F83C22002080008
- ON FOODS, Bando a Cascata SPOKE 3 Food Safety of Traditional and Novel Foods, **BIOINTECARD** Approcci integrati per la biovalutazione di integratori innovativi a base di Carduus marianus, Università degli Studi del Sannio - CeMON - Centro Delta (Settembre 2024-Ottobre 2025) - CUP H93C22000630001

2000 up to now, she **participated** to the following PRIN projects:

- 2000 Control of energy metabolism: thyroid hormones and uncoupling proteins, Scientific Coordinator Prof. F. Goglia
- 2002 Endocrine and molecular mechanisms of regulation of the metabolism, Scientific Coordinator Prof. F. Goglia
- 2004 Cellular And Molecular Mechanisms Involved In The Metabolic Homeostasis: Physio-Pathological Aspects, Scientific Coordinator Prof. F. Goglia
- 2006 Adiposity And Energy Balance: Endocrine Factors, Cellular Mechanisms And Physio-Pathological Aspects, Scientific Coordinator Prof. F. Goglia
- 2008 METABOLIC HOMEOSTASIS AND INSULIN RESISTANCE IN SKELETAL MUSCLE: ROLE OF 3,5-DIIODOTHYRONINE (T2), Scientific Coordinator Prof. F. Goglia
- 2017 "Enhancement of autophagy for therapy of liver diseases", Linea Sud, CUP: F84I19001150001", Scientific Coordinator Prof. Brunetti Pierri Nicola

Regione Campania (Legge Regionale N.5 del 28.03.2002) Projects:

Prof. Silvestri was

- Participant 2006 – Molecular processes and bioenergetics associated to rat skeletal muscle ageing-
- Participant 2005 – Age-induced changes in biological activity of thyroid hormones –
- Scientific Coordinator 2008** – Thyroid hormone effects on rat liver proteome.

Prof. Silvestri was

- Participant (Unisannio) in the project IMM DAC_PON03PE_00138 (2015-2017).

She also **participated** to the following projects:

2024 – 2025: PIANO NAZIONALE DI RIPRESA E RESILIENZA (PNRR)

MISSIONE 4– COMPONENTE 2 - INVESTIMENTO 1.3, PROGETTO “ZInc signal modulation In cell models of NEuRoinflammation and brain injurY / ZINERgY”, Coordinator Prof. Canzoniero, CODICE CUP: E63C22002170007

2024 – 2025: “Analisi e risk-assesment dei metaboliti postbiotici generati durante la digestione e la fermentazione di scarti derivati dalla produzione olearia” acronimo FOODRISKBYGENDER nell’ambito del Bando a Cascata, emanato con Decreto Rettorale n. 1200 del 29/03/2024 dell’Università degli Studi di Bari Aldo Moro a valere sul Progetto dal titolo “ON Foods (Research and innovation network on food and nutrition Sustainability, Safety and Security – Working ON Foods)”, codice identificativo MUR CN/PE00000003, finanziato nell’ambito dell’Avviso n. 341 del 15/03/2022 Piano Nazionale di Ripresa e Resilienza (PNRR), Missione 4 Componente 2 Investimento 1.3 – NextGenerationEU, Coordinator, Prof. Pagnotta

-PON RI 2014-202 –Azione II – Cluster tecnologici – D.D. 1735/2017 Avviso per la presentazione di Progetti di Ricerca Industriale e Sviluppo Sperimentale nelle 12 Aree di Specializzazione individuate dal PNR 2015-2020. Titolo del progetto: “Prodotti Innovativi ad alto contenuto biotecnologico per il settore medicale (INBIOMED)” ARS01_01081 – Responsabile Scientifico Prof. Vito Pasquale

-Avviso “PER IL SOSTEGNO ALLE IMPRESE CAMPANE NELLA REALIZZAZIONE DI STUDI DI FATTIBILITÀ (FASE 1) E DI TRASFERIMENTO TECNOLOGICO (FASE2) COERENTI CON IL RIS3” PROGETTO SIMS, CUP B63D18000480007. Responsabile Scientifico Prof. Vito Pasquale

-Gestione aziendale, benessere animale e metaboliti funzionali del latte – SALUTE – ID 31 - Progetto Ricerca e Sperimentazione nell’ambito del fondo per gli investimenti nel settore lattiero caseario - Ministero delle politiche agricole alimentari, forestali e del turismo- Dipartimento Delle Politiche Europee Ed Internazionali Dello Sviluppo Rurale Direzione Generale Dello Sviluppo Rurale DISR IV – Coordinatore del Progetto: Prof. Ettore Varricchio - Inizio Progetto: MARZO 2019 - Durata del Progetto: 24 mesi. Decreto Ministeriale del 19/12/2018 N. 36296. CUP: F84119000760001

e) Direction or participation in editorial committees of journals, editorial series, encyclopedias and treatises of recognized prestige

-2022, Prof. Silvestri was Guest Editor for the Special Issue: Thyroid in the periphery: diet supplementation in health and disease, Nutrients.

-2021-2023, Prof. Silvestri is Guest Editor for the Special Issue: Diet, Exercise, and the Metabolic Syndrome: Enrolment of Mitochondrial Machinery, Nutrients.

-2021-2024, Prof. Silvestri was Guest Editor for the Research Topic: "Redox Signaling and Homeostasis in the Control of Metabolism: A Systemic Interplay Between Central and Peripheral Effectors", Frontiers in Endocrinology.

-2024-2025, Prof. Silvestri is Guest Editor for the Special Issue: Mediterranean Diet and Metabolic Syndrome, Nutrients.

-2023-2025, Prof. Silvestri is member of the Editorial Board of *Nutrients*, MDPI, <https://www.mdpi.com/journal/nutrients/editors?search=silvestri>.

2014-to date - Prof. Silvestri is External Reviewer for the following International Journals:

1. General and comparative Endocrinology;
2. *Frontiers in Endocrinology*;
3. *Nutrients*;
4. *Life*;
5. *Journal of Physiology and Pharmacology*;
6. *Molecules*;
7. *International Journal of Molecular Science*,
8. *International Journal of Environmental Research and Public Health*;
9. *PlosONE*;
10. *Journal of Proteomics*;
11. *Journal of Proteome Research*;
12. *Expert Review in Proteomics*;
13. *Journal of Analytical Methods in Chemistry*;
14. *eBioMedicine (The Lancet)*.

f) Participation in the teaching staff, or assignment of teaching assignments, in the context of research doctorates accredited by the Ministry

Prof. Silvestri was

-Teaching board member for the PhD school in “SCIENZE E TECNOLOGIE PER L'AMBIENTE E LA SALUTE”, University of Sannio, Benevento, from 2014 to 2025;

-Teaching board member for the PhD school in “SCIENZE DELLA TERRA E DELLA VITA”, University of Sannio, Benevento, from 2006 to 2013.

-Tutor of the following doctoral degrees:

- Celia Di Munno, 2015-2018, PhD school in “SCIENZE E TECNOLOGIE PER L'AMBIENTE E LA SALUTE”, University of Sannio, Doctor Europeus, thesis title: “Peripheral thyroid hormone metabolism and proteomic profile of skeletal muscles and white adipose tissues in a rat model of catch-up fat”.

- Teresa Peluso, 2018-2021, PhD school in “SCIENZE E TECNOLOGIE PER L'AMBIENTE E LA SALUTE”, University of Sannio, Innovative doctorate with Industrial Characterization CUP: F85B18006450006, “Functional interaction between adipokines and hepatokines in dys-metabolisms: cellular models, biomarkers and environmental endocrine factors”.

Partners:

- Autonomous University of Madrid (Thyroid Molecular Laboratory. Institute for Medical and Molecular Genetics (INGEMM), La Paz University Hospital): Prof. José C. Moreno.

- Ca.re.bios - Campus Regi Biologia srl, Via Camporeale, Area PIP 83031 Ariano Irpino (AV), D'Andrea Egildo Luca, PhD.

- Giovanna Mercurio, 2021-2024, PhD school in “SCIENZE E TECNOLOGIE PER L'AMBIENTE E LA SALUTE”, University of Sannio.

-Co-tutor of the following doctoral degree:

Iole Pallodino, 2015-2018, PhD school in “SCIENZE E TECNOLOGIE PER L'AMBIENTE E LA SALUTE”, University of Sannio, thesis title: “Role of mitochondrial pathways in the effects of iodothyronines on 3T3-L1 cells.

h) Achievement of prizes and acknowledgments for scientific activity, including affiliation to prestigious academies in the sector

Prof. Silvestri was awarded as follows:

1. **September 2021** - Max Pierre König Poster Award, European Thyroid Association (ETA) in recognition of the best poster in basic thyroidology: “Differential deranged liver pathways in genetically determined thyroid dysfunctions: intra- and extrahepatic factors”.
2. **September 2008** - **National Award for Young Researchers in Physiology (Società Italiana di Fisiologia)**;
3. **July 2006** - The Italian Proteomic Association, Pisa, Italy. Beckman Coulter Award in Proteomics (BeCap Beckman), in recognition of the study "3,5,3'-Triiodo-L- Thyronine And Rat Liver Mitochondria Phenotype: A Proteomic Approach".

I) Specific professional experiences characterized by the candidate's research activities and relevant to the competition sector

- February 2020 – March 2022 - **Scientific Director of the Project**: "Study of new analytical methodologies applied to the patient suffering from terminal uremia in periodic hemodialysis treatment through animal modelling of human nephropathies and evaluation of the impact of lifestyle and eating habits as factors for prevention and / or treatment of degenerative metabolic diseases associated with type 2 diabetes and aging". **Project in agreement** between the Department of Science and Technology of the University of Sannio, Benevento and Lysitech Srl.

- June 1 2021 - to date, **Scientific Director of the Project**: "CLINICAL INVESTIGATION OF THE EFFECTS ON HEALTH AND SAFETY ON THE WORK OF TRUCKERS PRODUCED BY A BALANCED FOOD REGIME OF MEDITERRANEAN DIET AND CORRECT LIFESTYLE". **Project in agreement** between the Department of Science and Technology of the University of Sannio, Benevento and Lysitech Srl.

- October 28, 2021 to date - **Scientific Director of the Project**: "An innovative dietetic scheme in patients with end-stage chronic kidney disease undergoing periodic dialytic treatment (PDT) to prevent target organ damage". **Project in agreement** between the Department of Science and Technology of the University of Sannio, Benevento and “Organismo di Ricerca & Ricerca”, Società a r.l..

-From 26-02-2020 to date, **Scientific Consultant** for Lysitech Srl as an expert in Physiology, Endocrinology, Metabolism and Nutrition.

-From 30-04-2020 to date, **Member of the Scientific Technical Committee** of Lysitech Srl.

For the three-year periods 2015-2018 and 2018-2021, 2021-2024, she was/is the **Coordinator** of the in-depth educational and scientific dissemination **project “AmbienteFaScuola” in agreement** between the Department of Science and Technology, University of Sannio, and the Comprehensive Institute "G. Moscati "of Benevento.

She is member of the Italian Physiology Society.

She attends congresses and activities proposed by the Society. "La Società Italiana di Fisiologia (SIF) è una organizzazione non-profit fondata nel 1947, che si propone di promuovere e diffondere la conoscenza nel settore della Fisiologia".

She is member of the European Thyroid Association (ETA).

She attends congresses and activities proposed by the society.

The ETA is a scientific organization, which aims to promote clinical and basic research and raise the standards of understanding and clinical practice in thyroid disease.

She was **Tutor for MIT (Massachusetts Institute of Technology, Boston, USA) Externship at University of Sannio**, "Connecting Unisannio and MIT" Project.

Tutor of the following MIT students:

-Uriel Magana-Salgado – title of the project “MUSCLE RESPONSE & ROBOTICS”. December 2018 – January 2019

-Phoebe T Spear – title of the project “Using Bioinformatic approaches to study altered lipid metabolism”. December 2019 – January 2020

-Dana Haig – title of the project “Targeting mitochondrial dysfunction”. December 2019 – January 2020

Teaching activity at University of Sannio, Benevento, Italy:

Courses:

2003-2009 Environmental physiology (4 CFU),
2012-2013 Endocrinology (3 CFU),
2005-2012 Metabolism (3 CFU),
2013-2024 General Physiology (9 CFU),
2017-2022 Human Physiology (12 CFU)
2022-2025 Human Physiology (8 CFU)

She is a member of the examining committees of the exams of the courses activated for the BIO/09 PHYSIOLOGY sector of the Degree courses in Biological Sciences, Biotechnology and Biology of University of Sannio.

Supervisor of numerous Bachelor's Degree theses in Biological Sciences and Biotechnology and of Experimental Master's Degree theses in Biology.

Supervisor of two theses “Abilitazione alla classe di insegnamento A059 e A060” (TFA A.A. 2012-2013 and PAS A.A. 2013-2014).

Activities for the Degree Courses, Department of Science and Technologies, University of Sannio, Benevento

Since 2016, she has been

- member of the “Gruppo di Riesame” for the Bachelor's Degree in Biological Sciences and the Master's Degree in Biology;

- “Responsabile della Qualità “ for the Bachelor's Degree in Biological Sciences and the Master's Degree in Biology;

since 2014, she has been

- member of the Thesis and Internship Assignment Committee for the Bachelor's Degree Courses in Biological Sciences and Biotechnology;

Activities for the Department of Science and Technologies, University of Sannio, Benevento

since 2017 she has been

- member of the International Erasmus Committee of the Department of Science and Technology of the University of Sannio.

2017-2025 she was:

“Detentore” within the procedure of disposal of special wastes produced by the research laboratories of the Department of Science and Technologies, University of Sannio, Benevento.

She actively and personally participates in the experimental, technical and scientific training of trainees, undergraduates and doctoral students attending the Laboratory of Physiology,

Endocrinology and Metabolism, Department of Sciences and Technologies, University of Sannio,
Benevento.

Some relevant and recent publications

- 1) Mercurio G, Giacco A, Scopigno N, Vigliotti M, Goglia F, Cioffi F, **Silvestri E**. Mitochondria at the Crossroads: Linking the Mediterranean Diet to Metabolic Health and Non-Pharmacological Approaches to NAFLD. *Nutrients*. 2025 Mar 30;17(7):1214. doi: 10.3390/nu17071214.
- 2) Giacco A, Iervolino S, Cioffi F, Peluso T, Mercurio G, Roberto L, de Rosa V, Cammarota M, Varricchio S, Staibano S, Boscia F, Canzoniero LMT, De Felice M, Ambrosino C, Moreno M, **Silvestri E**. Brain Abnormalities in Young Single- and Double-Heterozygote Mice for Both Nkx2-1- and Pax8-Null Mutations. *Mol Neurobiol*. 2025 Apr;62(4):4023-4041. doi: 10.1007/s12035-024-04524-7.
- 3) Gentile, A., Magnacca, N., de Matteis, R., (...), **Silvestri, E.**, Lombardi, A. Ablation of uncoupling protein 3 affects interrelated factors leading to lipolysis and insulin resistance in visceral white adipose tissue 2022 *FASEB Journal* 36(5),e2232
- 4) Giacco A, Peluso T, Cioffi F, Iervolino S, Mercurio G, Roberto L, Reale C, Colella M, De Felice M, Moreno M, Ambrosino C, **Silvestri E**. Pax8 and Nkx2-1 haploinsufficiencies differentially affect liver metabolic pathways. *J Endocrinol*. 2022 Apr 15;253(3):115-132.
- 5) Cioffi, F., Giacco, A., Goglia, F., **Silvestri, E.** Bioenergetic Aspects of Mitochondrial Actions of Thyroid Hormones. 2022 *Cells* 11(6),997.
- 6) Cioffi, F., Giacco, A., Petito, G., (...), Lanni, A., **Silvestri, E.** Altered Mitochondrial Quality Control in Rats with Metabolic Dysfunction-Associated Fatty Liver Disease (MAFLD) Induced by High-Fat Feeding. 2022 *Genes* 13(2),315.
- 7) Di Munno C, Busiello RA, Calonne J, Salzano AM, Miles-Chan J, Scaloni A, Ceccarelli M, de Lange P, Lombardi A, Senese R, Cioffi F, Visser TJ, Peeters RP, Dulloo AG, **Silvestri E**. Adaptive Thermogenesis Driving Catch-Up Fat Is Associated With Increased Muscle Type 3 and Decreased Hepatic Type 1 Iodothyronine Deiodinase Activities: A Functional and Proteomic Study. *Front Endocrinol (Lausanne)* . 2021 Mar 4;12:631176. doi: 10.3389/fendo.2021.631176.
- 8) **Silvestri E**, Senese R, De Matteis R, Cioffi F, Moreno M, Lanni A, Gentile A, Busiello RA, Salzano AM, Scaloni A, de Lange P, Goglia F, Lombardi A. Absence of uncoupling protein 3 at thermoneutrality influences brown adipose tissue mitochondrial functionality in mice. *FASEB J* . 2020 Nov;34(11):15146-15163. doi: 10.1096/fj.202000995R.
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ai sensi e per gli effetti degli artt. 46 e 47 del T.U. n. 445/2000, così come modificato e integrato dall'articolo 15, comma 1, della Legge 12 novembre 2011, n. 183, consapevole delle responsabilità assunte innanzi alla legge con il presente atto, e delle sanzioni penali, nel caso di dichiarazioni non veritiere, di informazioni o uso di atti falsi, richiamate dall'art. 76 del D.P.R. 445 del 28/12/2000, che costituiscono reato e comportano la perdita del beneficio ottenuto

D I C H I A R A

che tutte le informazioni contenute nel proprio curriculum vitae e professionale sono veritiere.