

Vanessa Cossu

Researcher

EDUCATION AND TRAINING

[Example: university degree, high school diploma]

2022

PhD degree in Biotechnology in Translational Medicine - Bioimaging curriculum

Title of Thesis: "The contribution of the reticular Pentose Phosphate Pathway in glucose metabolism, cell proliferation and in the regulation of the redox state"

University of Genoa

2016

Master's degree in Molecular and Health Biology

University of Genoa

2014

Bachelor's degree in Biological Sciences

University of Genoa

PROFESSIONAL HISTORY

2023 – to day

Researcher (RTDA)

Human Anatomy Section

University of Genoa

2022 – 2023

Post-Doc Fellowship

Fellowship at the O.U. of Nuclear Medicine of IRCCS - Policlinico San Martino Hospital, funded by the Italian Association for Cancer Research (AIRC) within the five-year Project entitled: "Chemotherapy effect on cell energy metabolism and endoplasmic reticulum redox control (COENZIME)".

IRCCS - Policlinico San Martino Hospital.

2021 – 2022

Post-Doc Fellowship

Fellowship at the O.U. of Nuclear Medicine of IRCCS - Policlinico San Martino Hospital, funded by the Italian Association for Cancer Research (AIRC) within the five-year Project entitled: "Chemotherapy effect on cell energy metabolism and endoplasmic reticulum redox control (COENZIME)".

IRCCS - Policlinico San Martino Hospital.

2018 – 2021

PhD Student

Doctoral Fellowship at the Department of Experimental Medicine, University of Genoa. Course in Biotechnology in Translational Medicine / Bioimaging curriculum, XXXIV cycle. University of Genoa.

2017 – 2018

Research Fellowship

Fellowship at the O.U. of Nuclear Medicine, IRCCS - San Martino Polyclinic Hospital. Project title: "Impact of metformin treatment on the accuracy of PET/CT in the evaluation of cancer in diabetic patients."
IRCCS - Policlinico San Martino Hospital.

ACADEMIC APPOINTMENTS

2025 – to day

Teaching Committee Member

Delegate for BIOS-12/A (Human Anatomy)
University of Genova

EXPERIENCE

MAIN SEMINARS

2024 - 77° National Congress – Italian Society of Anatomy and Histology

Genova, 12-09-2024 to 14-09-2024

Cossu V, Mazzarello AN, Bertola N, Ferrero F, Bagnara D, Ghiotto F, Fais F, Ravera S, Bruno S. "The role of the Pentose Phosphate Pathway in Chronic Lymphocytic Leukemia and its contribution to chemotherapy resistance." Poster

2024 - MorFuture: gli studi di morfologia tra tradizione e innovazione

1° Congresso del comitato giovani degli Amici della Morfologia

Torino, 12-04-2024 to 13-04-2024

Cossu V, Bertola N, Regis S, Bruno S, Mazzarello AN, Serra M, Lupia M, Sabatini F, Corsolini F, Cappelli E, Ravera S. "Deacetylases inhibition in cellular models of Fanconi Anemia: effects on antioxidant responses and on mitochondrial network." Poster

2024 - 7th World Congress on Cancer Research and Therapy

Virtual Congress, Singapore, 19-01-2024 to 20-01-2024

Cossu V (oral presentation), Mazzarello A, Bertola N, Ferrero F, Bruno S, Panfoli I, Ravera S. "The potential role of the Pentose Phosphate Pathway in Chronic Lymphocytic Leukemia disease and chemotherapy resistance".

2023 - 76° National Congress – Italian Society of Anatomy and Histology

Modena, 11-09-2023 to 13-09-2023

Cossu V, Bertola N, Regis S, Bruno S, Mazzarello AN, Serra M, Lupia M, Sabatini F, Corsolini F, Cappelli E, Ravera S. "Deacetylases inhibition in cellular models of Fanconi Anemia: effects on antioxidant responses and on mitochondrial network." Poster

2021 - Festival della Comunicazione 2021

Camogli, 09-09-2021 to 12-09-2021.

Invitation as Speaker.

Title Section "Researchers from the University of Genoa."

Presentation Title: "Neoplastic pathologies: discovering a new metabolism of cancer cells"

2020 - International Congress: SPIE Medical Imaging

Houston (Texas), 15-02-2019 to 20-02-2020

R Lai, D Schenone, G Sambuceti, AM Massone, C Campi, A Chiò, C Caponnetto, A Cistaro, M Bauckneht, V Cossu, S Morbelli, C Marini, M Piana, "Prognostic power of the human psoas muscles FDG metabolism in amyotrophic lateral sclerosis," Proc. SPIE 11314, Medical Imaging 2020: Computer-Aided Diagnosis, 113141Z (16 March 2020); <https://doi.org/10.1117/12.2548857>. Poster.

2020 - European Annual Nuclear Medicine (EANM) 2020

Virtual, 22-10-2020 to 30-10-2020.

A. Miceli, M. Donegani, S. Raffa, S. Marra, V. Cossu, L. Emionite, S. Morbelli, C. Marini, G. Sambuceti, M. Bauckneht. The heterogeneous effect of chronic hyperglycaemia on brain 18F-FDG uptake: an experimental study. Eur J Nucl Med Mol Imaging (2020) 47 (Suppl 1): S1-S753, doi:10.1007/s00259-020-04988-4. Poster.

2019 - 92° SIBS Experimental biology in time and space. Research and scientific truth.

Sassari, dal 02-12-2019 al 04-12-2019

Cossu V, Marini C, Piccioli P, Rocchi A, Bruno S, Orengo AM, Emionite L, Bauckneht M, Grillo F, Capitanio S, Balza E, Yosifov N, Castellani P, Caviglia G, Panfoli I, Morbelli S, Ravera S, Benfenati F, Sambuceti G. Obligatory role of endoplasmic reticulum in brain FDG uptake. Editors, T. (2019). Experimental Biology in the time and the space. Research and scientific truth. Journal of Biological Research - Bollettino Della Società Italiana Di Biologia Sperimentale, 92(2s). doi.org/10.4081/jbr.2019.8724. Poster.

2019 - European Annual Nuclear Medicine (EANM) 2019 (International Congress)

Barcelona, 12-10-2019 to 16-10-2019

V. Cossu (oral presentation), M. Bauckneht, S. Bruno, A. Orengo, L. Emionite, F. Di Giulio, S. Capitanio, E. Balza, P. Castellani, P. Piccioli, A. Miceli, S. Raffa, A. Borra, M. Donegani, S. Morbelli, S. Ravera, G. Sambuceti, C. Marini. The Elusive Link between 18FDG uptake and Glycolytic Flux explains the Preserved Diagnostic Accuracy of PET-CT in Diabetic Cancer Patients Eur J Nucl Med Mol Imaging (2019) 46 (Suppl 1): S1-S952, doi: 10.1007/s00259-019-04486-2.

V. Cossu, G. Sambuceti, T. Bonifacino, S. Bruno, S. Ravera, V. Ceriani, P. Piccioli, P. Castellani, M. Bauckneht, S. Capitanio, D. Gandolfo, S. Morbelli, M. Milanese, A. Democrito, C. Ghersi, G. Bonanno, C. Marini. In vitro Evidence of Abnormal Glutamate to Glutamine Conversion in Astrocytes harvested from a Mouse Model of Amyotrophic Lateral Sclerosis: a potential Experimental Application of 13N-ammonia. Eur J Nucl Med Mol Imaging (2019) 46 (Suppl 1): S1-S952, doi: 10.1007/s00259-019-04486-2. Poster.

2018 - 1st Brainstorming research assembly for young neuroscientists (BRAYN)

Genoa, 28-06-2018 to 30-06-2018

V Cossu (oral presentation), P. Piccioli, A. Rocchi, A. Orengo, L. Emionite, M. Bauckneht, F. Grillo, S. Bruno, M. Scussolini, S. Ravera, F. Benfenati, C. Marini, G. Sambuceti. Brain Metabolic Response to Metformin: the role of Endoplasmic Reticulum.

2017 - European Annual Nuclear Medicine (EANM) 2017

Vienna, 21-10-2017 to 25-10-2017

Cossu V (oral presentation), Ravera S, Bruno S, Orengo A, Buschiazio A, Bellini A, Grillo F, Bauckneht M, Piana M, Gheri C, Morbelli S, Marini C, Sambuceti G. 2-deoxy-glucose is a Respiratory Substrate for Endoplasmic Reticulum of Murine Breast Carcinoma Cells: New View on PET-Imaging. Eur J Nucl Med Mol Imaging (2017) 44 Suppl 2S119-S956.

Bauckneht M, Pastorino F, Buschiazio A, Bellini A, Cossu V, Orengo A, Piccioli P, Caneva G, Pellegrino L, Emionite L, Ravera S, Morbelli S, Rubartelli A, Ponzoni M, Sambuceti G. Myocardial FDG imaging of oxidative damage underlying anthracycline cardiotoxicity. Eur J Nucl Med Mol Imaging (2017) 44 Suppl 2S119-S956. Poster

Buschiazio A, Orengo AM, Ravera S, Emionite L, Cossu V, Bellini A, Morbelli S, Bauckneht M, Raffaghello L, Gandolfo D, Bianchi G, Bruno S, Sambuceti G, Marini C. Metformin Effect on Brain Metabolism: the Role of Endoplasmic Reticulum. Eur J Nucl Med Mol Imaging (2017) 44 Suppl 2S119-S956. Poster.

EDITORSHIP OR PARTICIPATION IN EDITORIAL BOARDS OF JOURNALS, PUBLISHING SERIES, ENCYCLOPAEDIAS AND TREATISES**2024 – to date Guest Editor**

Guest Editor for the special Issue of Cells (ISSN 2073-4409): “Recent Advances in Metabolism and Oxidative Stress in Human Diseases 2.0”

PRIZES AND ACCOLADES FOR SCIENTIFIC ACTIVITY, INCLUDING MEMBERSHIP OF ACADEMIES**2017 – Selected article**

Article “Doxorubicin effect on myocardial metabolism as a pre-requisite for subsequent development of cardiac toxicity: a translational 18F-FDG PET/CT observation” published in 2017 su J Nucl Med was selected as “Featured Translational Science Article” of Journal of Nuclear Medicine, October 2017.

2018 – Awarded article

Article "Doxorubicin effect on myocardial metabolism as a pre-requisite for subsequent development of cardiac toxicity: a translational 18F-FDG PET/CT observation" published in 2017 in J Nucl Med was awarded the internationally prominent AlaviMandell Award sponsored by the Society of Nuclear Medicine and Molecular Imaging - SNMMI in June 2018.

2021 – Awarded article

Article “Spinal cord hypermetabolism extends to skeletal muscle in amyotrophic lateral sclerosis: a computational approach to [18F]-fluorodeoxyglucose PET/CT images” published in 2020 in EJNMMI Res was awarded the internationally prominent "EJNMMI Research Best Paper 2021" award from the European Journal of Nuclear Medicine and Molecular Imaging Research in September 2021