



Prof. PAOLA COCCETTI
BIOS-07/A - Biochimica

Curriculum vitae PAOLA COCCETTI

CURRENT POSITION

ASSOCIATE PROFESSOR
GDS 05/BIOS-07 – Biochemistry
SSD BIOS-07/A – Biochemistry
Department of Biotechnology and Biosciences
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<https://unimib.webex.com/meet/paola.cocchetti>

Languages: English and French

EDUCATION AND ACADEMIC TRAINING

2023: Attainment of the National Scientific Qualification, Full Professor BIOS-07/A Biochemistry.

2020-present: Associate Professor of Biochemistry, Department of Biotechnology and Biosciences, University of Milan-Bicocca.

1999-2020: Researcher in Biochemistry, Department of Biotechnology and Biosciences, University of Milan-Bicocca.

1996-1999: Postdoctoral Researcher, grant from the Milan Research Consortium at the Section of Comparative Biochemistry, Department of Physiology and General Biochemistry, University of Milan.

1994-1996: Postdoctoral Researcher, European Community grant within the “CEE-Biotech” project at the Section of Comparative Biochemistry, Department of Physiology and General Biochemistry, University of Milan.

1994: Short-term EMBO Fellowship, “Laboratoire de Biochimie,” Ecole Polytechnique, 91128 Palaiseau Cedex, France.

1992-1994: Research Activities at “Laboratoire de Biochimie,” Ecole Polytechnique, 91128 Palaiseau Cedex, France.

1989-1993: PhD in Biochemistry, Section of Comparative Biochemistry, Department of Physiology and General Biochemistry, University of Milan.

1989: Winner of a four-year ministerial scholarship for doctoral research in Biochemistry.

1989: Degree in Biological Sciences, University of Milan, Grade: 110/110 with honors.

1984: High School Diploma in Scientific Studies, Liceo Scientifico Luigi Cremona, Milan, Grade: 57/60.

TEACHING ACTIVITY

The teaching activity of PAOLA COCCETTI was conducted as a permanent Researcher from the year 2000 to 2019 and as an Associate Professor since 2020. The courses for which PAOLA COCCETTI has been and is responsible include: Cellular Biochemistry, Biochemical Methodologies and Biomolecular Technologies, Laboratory of Biochemical Technologies (Bachelor's Degree in Biotechnology); Functions and Dynamics of Intracellular Proteins (Bachelor's Degree in Biological Sciences); Cellular Biochemistry II (Master's Degree in Industrial Biotechnology); One-Health Laboratory, module on Bioactivity in Biological Models and Biochemistry of Natural Substances (Master's Degree in Biology).

DOCTORAL TUTOR

Supervisor and scientific advisor for doctoral students enrolled in the following PhD Courses: Converging Technologies for Biomolecular Systems (TeCSBi, <https://www.btbs.unimib.it/en/research/doctoral-program-tecsbi/doctoral-board>) and Industrial Biotechnology, University of Milano-Bicocca

2024-oggi

-Hind Moukham “Investigating new functions of AMPK in the regulation of autophagy and lipophagy”. (40th PhD cycle)

2023-oggi

-Alessia Lambiase “Characterization of plant bioactive molecules for prevention of neurodegenerative diseases”. (38th PhD cycle)

2018-2020

- Riccardo Milanesi “Integrating omics data to understand energy homeostasis and global regulation of mitochondrial functionality”. (34th PdD cycle)

2011-2013

- Raffaele Nicastro “Role of Snf1/AMPK as regulator of cell cycle, signal transduction and metabolism in *Saccharomyces cerevisiae*”. (27th PdD cycle)

2009-2011

-Sara Busnelli “Protein kinase Snf1/AMPK: a new regulator of G1/S transition in

Saccharomyces cerevisiae". (25th PdD cycle)

2007-2009

- Farida Tripodi "Protein kinase CK2: a major regulator of the G1/S transition in *Saccharomyces cerevisiae*". (17th PdD cycle)

2001-2003

- Flora Sternieri "The mutant Sic1S201A and Sic1S201E affected in the CK2 consensus site of the cyclin-Cdk inhibitor Sic1 exhibit an altered coordination between cell cycle progression and cell growth in *Saccharomyces cerevisiae*". (15th PdD cycle)

SCIENTIFIC LEAD FOR FUNDED RESEARCH PROJECTS

2023-2024

- Scientific Supervisor of Research Grant: "New bioactive and sustainable molecules against cellular senescence and neurodegeneration" awarded to Hind Moukham (Funded by European Community – NextGenerationEU. "On Foods - Research and Innovation Network on Food and Nutrition Sustainability, Safety and Security", Spoke 6, CUP: H43C22000820001).

2022-2023

- Scientific Supervisor of Research Grant: "Regulation of cellular size in cell cycle mutants of *Saccharomyces cerevisiae*" awarded to Hind Moukham (ID Project 2020-NAZ 0220/APER, CUP H45H20000320001).

2020-2021

- Scientific Supervisor of Research Grant: "Dissecting serine metabolism in the brain" awarded to Beatrice Badone, PRIN 2017 Project (2017H4J3AS_004, Settore ERC LS1(CUP:H45J19000470006).

2015-2019

- Scientific Supervisor of Research Grant: "Investigating the role of the energy sensor Snf1/AMPK in the control of cellular metabolism: from yeast studies to human colon cancer" awarded to Dr. Farida Tripodi (Type A Research Grant issued by the University of Milano-Bicocca. Grant duration: two years, renewable for an additional two years).

2016-2017

- Scientific Supervisor of Research Grant: "The role of Snf1/AMPK protein kinase in the regulation of glucose and amino acids metabolism in *Saccharomyces cerevisiae*" awarded to Andrea Castoldi (MIUR SysBioNet Project).

2011-2015

- Scientific Supervisor of Research Grant: "The kinase Ck2 in the regulation of mitosis in *Saccharomyces cerevisiae*" awarded to Dr. Farida Tripodi (Type A Research Grant issued by the University of Milano-Bicocca. Grant duration: two years, renewable for an additional two years).

2008

- Scientific Supervisor of Research Grant "Systems Biology in budding yeast: the G1/S phase transition" la transizione G1/S" awarded to Matteo Viganò. Client: Finlombarda

S.p.A., INGENIO Fund of the Lombardy Region, within the project: "Enhancement of Human Resources in the Field of Research and Technological Development."
(27/4/2008-31/21/2008).

- Scientific Supervisor of Research Grant "Characterization of the protein kinase Ck2 in the regulation of cell cycle in *S. cerevisiae*" awarded to Stefania Pessina. Client: Foundation Enaip of the Lombardy Region, title of the project: "Formation/research and Orientation"
(1/5/2008- 30/9/2008).

PARTICIPATION IN COMMITTEES AND RESPONSABILITY

2025

-Member of the Grading Committee for Alberto Ballin's doctoral thesis, title: "Glucose signaling through Snf1/AMPK in *Saccharomyces cerevisiae*: mechanistic insights from 2-deoxyglucose-resistant mutants", "Doctorat de Biologie Cellulaire et Moléculaire, École Doctorale 562 Bio Sorbonne", Paris, France.

2024-present

-Responsible for Quality Assurance (AQ) of the PhD program in Converging Technologies for Biomolecular (TeCSBi, <https://www.btbs.unimib.it/en/research/doctoral-program-tecsbi/doctoral-board>), University of Milano-Bicocca.

2022

-Member of the Grading Committee for Linnea Österberg's doctoral thesis, title: "Towards a comprehensive modelling framework for studying glucose repression in yeast" Department of Biology and Biological Engineering, division Systems and Synthetic Biology, Chalmers University of Technology, Gothenburg, Sweden.

-Member of the evaluation committee for the selection process to recruit one researcher (three-year employment contract pursuant to Article 24, paragraph 3, letter a, Law 240/2010), in the academic discipline BIO/10 Biochemistry, Department of Molecular and Translational Medicine, University of Brescia, Italy.

2021

- Member of the Grading Committee for the doctoral thesis of Converging Technologies for Biomolecular doctorate (TeCSBi), XXXIV PdD cycle, University of Milano-Bicocca, Italy

-Member of the evaluation committee for the selection process to recruit one researcher (three-year employment contract pursuant to Article 24, paragraph 3, letter a, Law 240/2010), in the academic discipline BIO/10 Biochemistry, Department of Medical Biotechnology and Translational Medicine, University of Milan, Italy.

2018

-Member of the Grading Committee for the doctoral thesis of Molecular and Cellular Biology Doctorate, University of Milan, Italy (30th PhD cycle).

-Member of the Grading Committee for the doctoral thesis of Biochemistry Doctorate, University of Milan, Italy (31st PhD cycle).

2011

-Member of the Admission Examination Committee for the Industrial Biotechnology Doctorate University of Milano-Bicocca, Italy (27th PhD cycle).

2006

- Member of the Admission Examination Committee for the Industrial Biotechnology Doctorate University of Milano-Bicocca, Italy (22nd PhD cycle).
- Member of the Admission Examination Committee for the Biomolecular Sciences and Biotechnology doctorate, University of Pavia, Italy (22nd PhD cycle).
- Member of the Grading Committee for the doctoral thesis of Genetic and Biomolecular Sciences Doctorate Admission Examination Committee for the Biomolecular Sciences and Biotechnology doctorate, University of Milan, Italy (19th PhD cycle).

MEMBER OF DOCTORAL BOARD

2021-present

- Doctoral Board of the PhD Course in Converging Technologies for Biomolecular doctorate (TeCSBi), Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy (37th-40th PhD cycles, <https://www.btbs.unimib.it/en/research/doctoral-program-tecsbi/doctoral-board>).

2017-2021

- Member of the extended board of PhD supervisors, PhD Course in Converging Technologies for Biomolecular doctorate (TeCSBi), Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy.

2016-2018

- Doctoral Board of the PhD Course in “Biology and Biotechnology”, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy (32th PhD cycle)

2015-2017

- Doctoral Board of the PhD Course in “Biology and Biotechnology”, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy (31st PhD cycle)

2014-2016

- Doctoral Board of the PhD Course in “Biology and Biotechnology”, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy (30th PhD cycle)

2013-2015

- Doctoral Board of the PhD Course in “Life Science”, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy (29th PhD cycle)

2006-2012

- Doctoral Board of the PhD Course in “Industrial Biotechnology”, Department of Biotechnology and Biosciences, University of Milano-Bicocca, Italy (22nd-28th PhD cycles)

REVIEWER OF PhD THESIS, PROJECTS AND PAPERS

2025

- PhD thesis reviewer of Alberto Ballin, title: “Glucose signaling through Snf1/AMPK in *Saccharomyces cerevisiae*: mechanistic insights from 2-deoxyglucose-resistant mutants”. “Doctorat de Biologie Cellulaire et Moléculaire, École Doctorale 562 Bio Sorbonne”, Parigi

2024

-PhD thesis reviewer of Silvia Breviario, title: "Dissecting the role of acid sphingomyelinase inhibition in Gaucher disease and GBA-dependent Parkinson's disease in vitro models" PhD Programme in Translational Medicine, Department of Biomedical Science, University of Milan, Italy (36th PhD cycle).

2022

-PhD thesis reviewer of Linnea Österberg's doctoral thesis, title "Towards a comprehensive modelling framework for studying glucose repression in yeast" Department of Biology and Biological Engineering, division Systems and Synthetic Biology, Chalmers University of Technology, Gothenburg, Sweden.

2020

-Reviewer of the following project "Understanding how regulation of gene expression by nutrient signalling shapes the molecular pathways of ageing" for Babraham Institute, Cambridge (Grant Reference: BB/V001337/1).

-PhD thesis reviewer of Claudia Capusoni, title "Application of non-conventional yeasts in bioprocesses" PhD Programme in Food Systems (32th PhD cycle), Department of Food, Environmental and Nutritional Sciences (DeFENS), University of Milan, Italy.

2016-oggi

-Register of Expert Peer Reviewers for Italian Scientific Evaluation.

2015

-Reviewer for Italian Research Ministry for VQR 2011-2014 evaluation, GEV 05 and GEV 06.

2013

-Reviewer for Italian Research Ministry for the following research program: "Futuro in Ricerca 2013".

2012-2015

-Reviewer appointed at the University of Verona (Italy) for the evaluation of joint research projects with companies (Joint Projects 2012 e 2015).

2010

-Reviewer for Italian Research Ministry for the following research program: "Futuro in Ricerca 2010".

2011

-Reviewer for Italian Research Ministry for VQR 2004-2010 evaluation, GEV 05 and GEV 06.

2000-oggi

-Reviewer for the following journals:

Oncogene, Cellular and Molecular Biology Letters, Molecular Biosystems, Medicinal Chemistry Communication, BMC Cancer, European Journal of Medicinal Chemistry, Biochimica et Biophysica Acta - General Subjects, Current Genetics, FEMS Yeast Research, FEMS Microbiology Letters, Yeast, Molecular and Cellular Biochemistry, Current Bioactive Compounds, Cell Systems, Molecules, OMICS, Molecular OMICS, iScience, Computers in Biology and Medicine, Microbial Cell, Biotechnology Advances, Plos Genetics, BioFactors, Computational and Structural Biotechnology Journal, Life Sciences, NeuroToxicology,

Proceedings of the National Academy of Sciences (PNAS), Redox Biology, Cell Reports, Journal of Pharmaceutical Analysis.

EDITORIAL ACTIVITIES AND MEMBER OF SCIENTIFIC SOCIETIES

2024-oggi

-Board Member of Nutrients, MDPI

(<https://www.mdpi.com/journal/nutrients/editors?search=Paola+Cocchetti>).

-Guest Editor for Nutrients, Special number “Bioactive Ingredients in Plants Related to Human Health” (https://www.mdpi.com/journal/nutrients/special_issues/UE42WUB1A1).

2017-oggi

-Academic Editor of Microbial Cell, session: “Cell Physiology and Cell Signaling” (<https://microbialcell.com>).

2013-2017

-Editorial Member of Dataset Papers in Science: Cell Biology, Hindawi Publishing Corporation, peer-reviewed, Open Access journal.

2007-oggi

-Ordinary Member of the Italian Society of Biochemistry and Molecular Biology Soci (SIB), (<https://sib-biochemistry.it>).

RESEARCH FUNDINGS

2022-present

-Research title: “Identification of bioactive molecules extracted from plants with anti-aging, anti-inflammatory and neuroprotective properties”, funded by the European Union—NextGenerationEU; Award Number: Project code CN_00000033, Concession Decree No. 1034 of 17 June 2022. Adopted by the Italian Ministry of University and Research, CUP: H43C22000530001, Spoke 6, Project title “National Biodiversity Future Center—NBFC”, Biodiversity and human wellbeing, CUP: H43C22000530001, 2022-NAZ-0450/COCCHETTI, 444.841,00 euro.

- Research title: “ON Foods - Research and innovation network on food and nutrition Sustainability, Safety and Security – Working ON Foods”, - Research and Innovation Network on Food and Nutrition Sustainability, Safety and Security”, Spoke 6–NextGenerationEU), CUP: H43C22000820001, 2022-NAZ-0456/COCCHETTI, 169.475,00 euro.

2019-2023

-Project: PRIN 2017 (2017H4J3AS_004, Settore ERC LS1, Coordinator: Prof. Loredano Pollegioni), title of the project: “Dissecting serin metabolism in the brain”, CUP:H45J19000470006, PI of Milano-Bicocca Research Unit: COCCETTI, 157.000 euro.

2017-2021

-Project “Food Systems and Sustainable Development, creating synergies between international and African research program and process” (SASS, CUP: H42F16002450001, Coordinator: Prof. Massimo Labra), Research Unit coordinated by COCCETTI, 150.000 euro.

2017

-FFABBR_NAT– National funding from the Italian Ministry of Research (MIUR).

2008-2015

-Member of Research Program UNICELLSYS 12-4160, EU-funded Coordination Action yeast Systems Biology Network, Coordinator Prof. Lilia Alberghina (<http://www.unicellsys.eu>).

2008-present

Scientific referent of ATE Research Programs from University Milano-Bicocca.

2006-2008

-Participant in the PRIN Research Program, Scientific Coordinator: Prof. Marco Vanoni, Project Title: "Cell cycle progression and cell death in *Saccharomyces cerevisiae*: the role of nutrients and protein kinase CK2."

2002-2004

-Participant in the PRIN Research Program, Scientific Coordinator: Prof. Antonio De Flora, Scientific Supervisor: Prof. Marco Vanoni, Project Title: "Integrative and comparative analysis of the calcium-dependent modulation of transcriptome, proteome and cell cycle progression in yeast and mammalian cells"

2000-2002

Participant in the PRIN Research Program, Scientific Coordinator: Prof. Antonio De Flora, Scientific Supervisor: Prof. Lilia Alberghina, Project Title: "Effect of high intracellular calcium levels on the regulation of cell proliferation and gene expression in mammalian fibroblasts."

SPEAKER IN NATIONAL SCIENTIFIC CONFERENCES

2023

-Title: "Multiomic analyses pinpoint distinct metabolic pathways during differentiation of hiPSC-derived astrocytes", Congress: "Bioprosys Joint Meeting: from basic understanding of cell networks to their modulation and engineering for health and industrial applications", SIB Workshop, 18-19 May, University Luigi Vanvitelli, Napoli, Italy.

2017

-Title: "Proteomics and integrative omic approaches for understanding the control of energy homeostasis", SIB Workshop on "Computational and Systems Biology", University of Bologna, Italy.

2016

-Title: "Methionine metabolism imbalance in AMPK-deficient yeast models" (Session: Nutrition Biochemistry), "XIV FISV Congress (Italian Federation of Life Sciences), 20-23 September, University La Sapienza Roma, Italy

2015

-Title: "Glucose and amino acids addiction is a typical hallmark of Snf1/AMPK-deficient cells" (Symposium: Metabolism and Computational Biology), 58th National Meeting of the Italian Society of Biochemistry and Molecular Biology, 14-16 September, University of Urbino, Italy

SPEAKER IN INTERNATIONAL SCIENTIFIC CONFERENCES

2024

-Title: "Snf1/AMPK in budding yeast: a kinase with several functions", 6th European Workshop on AMPK, 29/9-2/10 2024, Domaine Saint Joseph Lyon, France.

-Title: "Beans and Mushrooms extracts: functional food with anti-aging and neuroprotective properties", 6th World Ageing and Rejuvenation Conference, 8-10 July 2024, Paris, France.

2021

-Title: "Neuroprotective Properties of Extracts from *G. frondosa* and *H. erinaceus* in models of neurodegeneration" (Session: Dietary supplements, nutraceuticals, and functional foods in neuroprotection), "2nd International Conference on Neuroprotection by Drugs, Virtual edition.

2019

-Title: "Neuroprotective Properties of Standardized Extracts from *Vigna unguiculata* in yeast models of neurodegeneration", 1st International Conference on Neuroprotection by Drugs, Nutraceuticals and Physical Activity (Session: Neuroprotection by Nutraceuticals). Rimini 6-7 June 2019, Rimini, Italy.

2017

-Title: "Snf1/AMPK regulates metabolism and autophagy in a methionine-dependent manner" (Session: Autophagy/Mitophagy), 12th International Meeting on Yeast Apoptosis", 14-18 May 2017 Bari, Italy.

2016

-Title: "Snf1/AMPK in budding yeast: not only a guardian of energy homeostasis in nutritional deprivation", invited by Prof. Jean Marie Francois at the "Institute National des Sciences Appliquées", PhD Seminar, Toulouse, France.

2015

-Title: "Glucose and amino acids addiction is a typical hallmark of Snf1/AMPK deficient cells", 27th International Conference on Yeast Genetics and Molecular Biology, (Symposium W4: Growth Control and Metabolism), Levico Terme, 6-12 September 2015, Italy.

2013

-Title: "Protein kinase Snf1/AMPK: a new regulator of G1/S transition in *Saccharomyces cerevisiae*", Conference of the European Project UNICELLSYS, Innsbruck, Austria.

2010

-Title: "CK2 is modulated by nutritional conditions in budding yeast" (Session E: CK2 in yeasts, plants, and non-vertebrate animals), "6th International Conference on Protein Kinase CK2, University di Cologne, 7-10 September 2010, Cologne, Germany.

RESEARCH PROJECTS AND COLLABORATIONS

The research activity concerns the study of the molecular mechanisms that regulate cell cycle, signal transduction and cell growth, with a focus on energetic metabolism and its dysfunctions linked to human diseases. The main topics of research are listed below, some of which are currently in progress. 1) Metabolism has been studied using different cellular

systems also through systems biology approaches. Through proteomics, metabolomics and metabolic flux analyses, a new function of the AMP-activated protein kinase (AMPK), the main regulator of cellular energy homeostasis, was identified as a repressor of mitochondrial respiration and pyruvate entry into mitochondria in the unicellular organism *S. cerevisiae*. The metabolism of methionine in hepatocellular carcinoma cell lines was also evaluated. An integrated proteomics and metabolomics analysis indicated that methionine metabolism and AMPK activity play a crucial function in TCA regulation, cell growth and migration, showing a synergistic role in reducing liver cancer progression at least *in vitro*.

2) Through multidisciplinary approaches and in collaboration with Dr. Milo Frattini (Institute of Pathology, Locarno, Switzerland) we demonstrated, in colorectal cancer (CRC) cell lines, the antitumor and apoptotic roles of new synthesized molecules deriving from Combretastatin and Resveratrol, compounds of natural origin and with documented anti-tumor activity. These molecules exhibit a consistent AMPK-dependent anti-proliferative and apoptotic action both in different tumour cell lines and in xenograft mouse models of CRC, opening the route to a new class of potential therapeutic agents.

3) AMPK and the target of rapamycin complex 1 (TORC1) are central kinase modules of two opposing signaling pathways that control eukaryotic cell growth and metabolism in response to the availability of energy and nutrients. Accordingly, energy depletion activates AMPK to inhibit growth, while nutrients and high energy levels activate TORC1 to promote growth. In collaboration with Prof. Claudio De Virgilio of the University of Freiburg and with the aim of investigating the reciprocal regulation of these two kinases we used a mass spectrometry analysis of phosphoproteomic. We showed that AMPK temporally maintains TORC1 inactive in glucose-starved cells primarily through the phosphorylation of TORC1-regulatory proteins Sch9 and Pib2. In addition, a novel feedback regulation of AMPK activity is actually under investigation.

4) In collaboration with Prof. Leah Cowen of the University of Toronto, the mechanism of action of the natural product bovericin, used in the treatment of pathogenic fungal infections, was identified. In addition to inhibiting the Pdr5 transporter, bovericin also inhibits the TORC1 kinase with consequent inhibition of both the CK2 kinase and the Hsp90 chaperone, involved in the "drug resistance" mechanisms.

5) Metabolic alterations were investigated in post-mortem hippocampal samples in male and female cohorts affected by Alzheimer disease (AD) using an integrated mutiomics approach. Studies have indicated profound differences between control groups and male and female AD cohorts in terms of metabolic pathways, also highlighting a strong modulation of serine metabolism and different sex-dependent pathophysiological mechanisms.

6) Studies have also been focused on understanding the effects of plant-derived bioactive compounds on aging and protein aggregation responsible for neurodegeneration, using specific cellular models expressing human alpha-synuclein.

COLLABORATIONS:

- Dr. Luigi Russo, Institute of Food Sciences, National Research Council, CNR, Avellino, Italy.
- Dr. Stefania Sarno Department of Biomedical Sciences, University of Padova, Italy.
- Dr. Roberto Pagliarin, Dipartimento di Chimica Organica e Industriale, Università di Milano.

-Dr. Elia Di Schiavi, Institute of Biosciences and BioResources, CNR, Napoli, Italy.

-Prof. Rosa Maria Moresco, PET and Nuclear Medicine Unit, San Raffaele Scientific Institute, Milan, Italy.

-Prof. Oriano Marin, Department of Biomedical Sciences, University of Padova, Padova, Italy.

-Prof. Gabriella Tedeschi, Department of Veterinary Medicine, University of Milano, Italy.

-Prof. Cristina Angeloni, School of Pharmacy, University of Camerino, Italy.

-Prof. Monica Bucciantini, Department of Experimental and Clinical Biomedical Sciences, University of Firenze, Italy.

-Prof. Hellas Cena, Laboratory of Dietetics and Clinical Nutrition, Department of Public Health, Experimental and Forensic Medicine, University of Pavia, Italy.

-Prof. Loredano Pollegioni, Università degli Studi INSUBRIA Varese-Como.

-Dr. Milo Frattini, Institute of Pathology, Locarno, Switzerland.

-Prof. Jens Nielsen, Department of Chemical and Biological Engineering, Chalmers University of Technology, Gothenburg, Sweden.

-Prof. Johan Thevelein, Laboratory of Molecular Cell Biology, Institute of Botany and Microbiology, KU Leuven, Belgium.

Prof. Leah Cowen, Department of Molecular Genetics, University of Toronto, Toronto, Canada.

Prof. Rajendra Prasad, School of Life Sciences, Jawaharlal Nehru University, New Delhi 110067, India.

Prof. Claudio De Virgilio, Department of Biology, University of Fribourg, Fribourg, Switzerland.

Prof. Paula Ludovico Life and Health Sciences Research Institute (ICVS), School of Medicine, University of Minho, Braga, Portugal.

Prof. Marina Cvijovic, Department of Mathematical Sciences, Chalmers University of Technology and University of Gothenburg, Sweden.

PATENT

2013

Pagliarin R, Orsini F, Montano G, Tripodi F, Coccetti P, Fusi P. "1,4-Diaryl-2-Azetidinones with antitumoral activity". International Publication Number WO 2013/017548 A1.

PUBLICATIONS

ORCID: 0000-0001-5898-5883

Scopus H-index: 26

Google Scholar: H-index: 32; i10-index: 49

1. Tripodi F, Lambiase A, Moukham H, Spandri G, Brioschi M, Falletta E, D'Urzo A, Vai M, Abbiati F, Pagliari S, Salvo A, Spano M, Campone L, Labra M, **Coccetti P***. Targeting protein aggregation using a cocoa-bean shell extract to reduce α -synuclein

- toxicity in models of Parkinson's disease. *Current Research in Food Science* 2024, 9, 100888. <https://doi.org/10.1016/j.crfs.2024.100888>.
2. Braam S, Tripodi F, Österberg L, Persson S, Welkenhuysen N, **Coccetti P**, Cvijovic M. Exploring carbon source related localization and phosphorylation in the Snf1/Mig1 network using population and single cell-based approaches. *Microbial Cell* 2024, 11: 143-154. doi: 10.15698/mic2024.05.822.
 3. Moukham H, Lambiase A, Barone GD, Tripodi F, **Coccetti P**. Exploiting Natural Niches with Neuroprotective Properties: A Comprehensive Review. *Nutrients* 2024, 16, 1298. <https://doi.org/10.3390/nu16091298>.
 4. Docimo T, Celano R, Lambiase A, Di Sanzo R, Serio S, Santoro V, **Coccetti P**, Russo M, Rastrelli L, Piccinelli A.L. Exploring Influence of Production Area and Harvest Time on Specialized Metabolite Content of *Glycyrrhiza glabra* Leaves and Evaluation of Antioxidant and Anti-Aging Properties. *Antioxidants* 2024, 13, 93. <https://doi.org/10.3390/antiox13010093>.
 5. Tripodi F, Motta Z, Murtas G, Rabattoni V, Nonnis S, Grassi Scalvini F, Rinaldi AM, Rizzi R, Bearzi C, Badone B, Sacchi S, Tedeschi G, Maffioli E, **Coccetti P***, Pollegioni L. Serine metabolism during differentiation of human iPSC-derived astrocytes. *FEBS J.* 2023 May 11. Doi: 10.1111/febs.16816. *Co-corresponding
 6. Barone GD, Cernava T, Ullmann J, Liu J, Lio E, Germann AT, Nakielski A, Russo DA, Chavkin T, Knufmann K, Tripodi F, **Coccetti P**, Secundo F, Fu P, Pflieger B, Axmann IM, Lindblad P. Recent developments in the production and utilization of photosynthetic microorganisms for food applications. *Heliyon.* 2023 22;9(4):e14708. Doi: 10.1016/j.heliyon.2023.e14708.
 7. Barone GD, Emmerstorfer-Augustin A, Biundo A, Pisano I, **Coccetti P**, Mapelli V, Camattari A. Industrial Production of Proteins with *Pichia pastoris*—*Komagataella phaffii*. *Biomolecules* 2023, 13(3), 441; <https://doi.org/10.3390/biom13030441>.
 8. Caligaris M, Nicastro R, Hu Z, Tripodi F, Hummel JE, Pillet B, Deprez MA, Winderickx J, Rospert S, **Coccetti P**, Dengjel J, De Virgilio C. Snf1/AMPK fine-tunes TORC1 signaling in response to glucose starvation. *eLife.* 2023 12:e84319. Doi: 10.7554/eLife.84319.
 9. Maffioli E, Murtas G, Rabattoni V, Badone B, Tripodi F, Iannuzzi F, Licastro D, Nonnis S, Rinaldi AM, Motta Z, Sacchi S, Canu N, Tedeschi G, **Coccetti P***, Pollegioni, Loredano (2022). Insulin and serine metabolism as sex-specific hallmarks of Alzheimer's disease in the human hippocampus. *Cell Rep.* 2022 40(10):111271. Doi: 10.1016/j.celrep.2022.111271. *Co-corresponding
 10. Tripodi F, Falletta E, Leri M, Angeloni C, Beghelli D, Giusti L, Milanesi R, Sampaio-Marques B, Ludovico P, Goppa L, Rossi P, Savino E, Bucciantini M, **Coccetti P***. Anti-Aging and Neuroprotective Properties of *Grifola frondosa* and *Hericium erinaceus* Extracts. *Nutrients.* 2022 14(20):4368. Doi: 10.3390/nu14204368.
 11. Milanesi R, Tripodi F, Vertemara J, Renata Tisi R, **Coccetti P***. AMPK Phosphorylation Is Controlled by Glucose Transport Rate in a PKA-Independent Manner. (2021) *Int. J. Mol. Sci.* 2021, 22(17), 9483; <https://doi.org/10.3390/ijms22179483>

12. Conti M.V, Guzzetti L, Panzeri D, De Giuseppe R, **Coccetti P**, Labra M, Cena H. Bioactive compounds in legumes: Implications for sustainable nutrition and health in the elderly population. (2021) Trends in Food Science & Technology. Doi:10.1016/j.tifs.2021.02.072.
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