

Europass Curriculum Vitae

Personal information

First name(s) /Surname(s) **Luca Casadei**

Telephone(s)

E-mail(s)

Nationality

Date of birth

Desired employment / Occupational
field

Metabolomic analysis; NMR Spectroscopy; Multivariate data analysis.

Work experience

Dates	01 April 2017 - 30 June 2017
Occupation or position held	Short-term scholar
Main activities and responsibilities	Use of metabolomic techniques to study the nutritional status and stress of mother cows
Name and address of employer	School of the Environment, Washington State University, Pullman WA 99164, USA, Scientific responsible Prof. Robert Wielgius
Dates	01 June 2014 - 01 October 2016
Occupation or position held	<u>Research fellow</u>
Main activities and responsibilities	Research Project Title: "Hepatic Cells and Microgravity".
Name and address of employer	CITO, Consorzio Interuniversitario Trapianti d'Organo, Via G. M. Lancisi, 31, 00161 Rome, Italy Scientific project leader: Prof. Domenico Alvaro , Chief of Gastroenterology Division, Medico-Surgical Sciences and Biotechnologies Dpt., Sapienza University of Rome, Italy Scientific responsible of the metabolomics Unit: Prof. Cesare Manetti , Chemistry Dpt., Sapienza University of Rome, Italy
Dates	November 2015 - December 2015
Occupation or position held	Short-term scholar
Main activities and responsibilities	Use of metabolomic techniques to study the nutritional status and stress of mother cows
Name and address of employer	School of the Environment, Washington State University, Pullman WA 99164, USA, Scientific responsible Prof. Robert Wielgius
Dates	April 2015
Occupation or position held	<u>Scientific advisor</u>
Main activities and responsibilities	Metabolomics analysis of Ginkgo biloba's extracts
Name and address of employer	LINNEA SA , Via Cantonale CH - 6595 Riazzino (TI), Switzerland
Dates	March 2014 – September 2014
Occupation or position held	<u>Scientific advisor</u>
Main activities and responsibilities	Metabolomics analysis of blueberry's extracts
Name and address of employer	LINNEA SA , Via Cantonale CH - 6595 Riazzino (TI), Switzerland

Dates January 2014
Occupation or position held Scientific advisor
Main activities and responsibilities Metabolomics analysis of eighteen natural plant extracts on human epatoma cells in comparison with control drug.
Name and address of employer **Aboca S.p.a.** Società Agricola, Località Aboca, 20, 52037 Sansepolcro (AR) - Italy

Dates 01 February 2012 – 31 August 2014
Occupation or position held Scientific advisor
Main activities and responsibilities "Data collection and data entry for EFSA's chemical hazards database"
"Data entry, chemical identification and toxicity data collection"
Name and address of employer **S-IN – Soluzioni informatiche srl**, Via Ferrari, 14 - 36100 Vicenza, Italy

Dates January 2012 – December 2012
Occupation or position held Scientific advisor
Main activities and responsibilities Study of the metabolic effects of mucoadhesive Bioanacid and Colilen on the gastrointestinal tracts of rats.
Name and address of employer **Aboca S.p.a.** Società Agricola, Località Aboca, 20, 52037 Sansepolcro (AR) - Italy

Dates February 2011 – March 2019
Occupation or position held Scientific advisor
Main activities and responsibilities "Metabolomics analysis of propolis extracts"
"Study of the metabolic effects of mucoadhesive Bioanacid and Colilen on the gastrointestinal tracts of rats"
"Metabolomics analysis of eighteen natural plant extracts on human epatoma cells in comparison with control drug"
"Metabolic effects of ABO2 on YAP/TAZ/TEAD oncogenic axis in mesothelioma"
Name and address of employer **Aboca S.p.a.** Società Agricola, Località Aboca, 20, 52037 Sansepolcro (AR) - Italy

Dates 14-16 May 2009
Occupation or position held Secreteriat of Scientific Organizing Committees
Main activities and responsibilities The second Maga Circe Conferences: "Metabolomics and Cancer"/The third school of metabolomics
Name and address of employer Co-Chairmen of Scientific Organizing Committees: **Prof. Filippo Conti**, Chemistry Dpt., Sapienza University of Rome, Italy and **Prof. Luigi Frati**, Faculty of Medicine and Surgery, "La Sapienza" University of Rome

Dates 01 November 2009 - 01 November 2012
Occupation or position held Ph.D. in Biophysics
Main activities and responsibilities Nuclear Magnetic Resonance (NMR) based Metabolomics Analysis.
Title thesis: "Metabolomics and cancer: perspectives from in vitro to ex-vivo"
Name and address of employer Supervisor: **Prof. Cesare Manetti**, Sapienza University of Rome, Italy

Dates 2012-2014
Occupation or position held University teaching
Main activities and responsibilities Academic support courses in Physical-Chemistry of Biological Systems
Name and address of employer Biology and Biotechnology Dpt., Sapienza University of Rome, Italy

Dates 2012
Occupation or position held Tutoring activity
Main activities and responsibilities Master in Bioinformatics
Name and address of employer **Prof. Stefano Pascarella**, Biochemical Sciences Dpt., Sapienza University of Rome, Italy

Education and training

Dates 01 November 2009 - 01 November 2012
Title of qualification awarded **Doctorate in Biophysics**

Principal subjects/occupational skills covered	Nuclear Magnetic Resonance (NMR) based Metabolomics Analysis.
Name and type of organisation providing education and training	Thesis Title: " Metabolomics and cancer: perspectives from in vitro to ex-vivo". Supervisor: Prof. Cesare Manetti, Sapienza University of Rome, Italy
Level in national or international classification	Ph.D.
Dates	2009
Title of qualification awarded	Master's Degree in Biology (110/110 e Lode)
Principal subjects/occupational skills covered	Nuclear Magnetic Resonance (NMR) based Metabolomics Analysis. Thesis title: "Metabolic effects of a short exposure to low dose of Metformin on breast cancer cell cultures via NMR-based metabolomics".
Name and type of organisation providing education and training	Supervisor: Prof. F. Porcelli, Tuscia University, Viterbo, Italy
Level in national or international classification	Master's Degree
Dates	2007
Title of qualification awarded	Bachelor's Degree in Biology (110/110 e Lode)
Principal subjects/occupational skills covered	Protein Folding; Nuclear Magnetic Resonance Spectroscopy; Circular Dichroism Thesis title: "Proteina beta-amilode: determinanti strutturali e cambi conformazionali responsabili della formazione delle fibrille".
Name and type of organisation providing education and training	Supervisor: Prof. F. Porcelli, Tuscia University, Viterbo, Italy
Level in national or international classification	Bachelor's Degree
Dates	15-16 March 2011
Principal subjects / occupational skills covered	"Advanced NMR Spectroscopy", Chemistry Dpt., Sapienza University of Rome, Italy
Name and type of organisation providing education and training	Agilent S.p.A. (Company)
Dates	13 May 2009
Principal subjects / occupational skills covered	Third school of metabolomics analysis
Name and type of organisation providing education and training	Sapienza University of Rome, Italy
Dates	4-5 June 2007
Principal subjects / occupational skills covered	Second school of metabolomics analysis
Name and type of organisation providing education and training	Sapienza University of Rome, Italy

Personal skills and competences

Mother tongue(s)	Italian				
Other language(s)					
Self-assessment	Understanding		Speaking		Writing
<i>European level (*)</i>	Listening	Reading	Spoken interaction	Spoken production	
English	C Independent 2 user	C Proficient 2 user	C Independent 2 user	C Independent 2 user	C Independent 2 user
	<i>(*) Common European Framework of Reference (CEF) level</i>				

- Technical skills and competences
- Excellent knowledge of NMR instrumentation (Bruker Avance DRX 500, Avance II 400 and Varian/Agilent VNMRS 500)
 - Good knowledge of Gas Chromatograph-Mass Spectrometer, high-performance liquid chromatography (HPLC) instrumentation and UV/visible spectrophotometer

Computer skills and competences

- Operating Systems: Linux, Windows
- Expert of the main software of acquisition, processing and statistical analysis of NMR data

Additional information

LIST OF PUBLICATION - peer reviewed

2020

A contribution to the harmonization of non-targeted NMR methods for data-driven food authenticity assessment

Gallo, V., Ragone, R., Musio, B. et al. Food Anal. Methods (2020) 13: 530.
<https://doi.org/10.1007/s12161-019-01664-8>.

Fecal Metabolomics as a Novel Noninvasive Method for Short-Term Stress Monitoring in Beef Cattle.

Valerio A, Casadei L, Giuliani A, Valerio M.
J Proteome Res. 2020 Feb 7;19(2):845-853. doi: 10.1021/acs.jproteome.9b00655. Epub 2020 Jan 9.

2019

Dropwort-induced metabolic reprogramming restrains YAP/TAZ/TEAD oncogenic axis in mesothelioma.

Pulito C, Korita E, Sacconi A, Valerio M, Casadei L, Lo Sardo F, Mori F, Ferraiuolo M, Grasso G, Maidecchi A, Lucci J, Sudol M, Muti P, Blandino G, Strano S.
J Exp Clin Cancer Res. 2019 Aug 9;38(1):349. doi: 10.1186/s13046-019-1352-3.

Simulated microgravity promotes the formation of tridimensional cultures and stimulates pluripotency and a glycolytic metabolism in human hepatic and biliary tree stem/progenitor cells.

Costantini D, Overi D, Casadei L, Cardinale V, Nevi L, Carpino G, Di Matteo S, Safarikia S, Valerio M, Melandro F, Bizzarri M, Manetti C, Berloco PB, Gaudio E, Alvaro D.
Sci Rep. 2019 Apr 3;9(1):5559. doi: 10.1038/s41598-019-41908-5.

2018

Cattle Metabolic Fingerprinting to Predict Acute Stress Response Post-Wolf Encounters

Valerio, Azzurra, Wielgus, Robert, Valerio Mariacristina and Casadei, Luca
Proc. 28th Vertebr. Pest Conf. (D.M. Woods, Ed.) Published at Univ. of Calif., Davis. 2018. Pp. 77-84

Gut microbiota signatures in cystic fibrosis: Loss of host CFTR function drives the microbiota enterophenotype.

Vernocchi P, Del Chierico F, Russo A, Majo F, Rossitto M, Valerio M, Casadei L, La Stora A, De Filippis F, Rizzo C, Manetti C, Paci P, Ercolini D, Marini F, Fiscarelli EV, Dallapiccola B, Lucidi V, Miccheli A, Putignani L.
PLoS One. 2018 Dec 6;13(12):e0208171. doi: 10.1371/journal.pone.0208171. eCollection 2018.

Metabolomics: Challenges and Opportunities in Systems Biology Studies.

Casadei L, Valerio M, Manetti C.
Methods Mol Biol. 2018;1702:327-336. doi: 10.1007/978-1-4939-7456-6_16.

2017

Che-1 sustains hypoxic response of colorectal cancer cells by affecting Hif-1 α stabilization.
Bruno T, Valerio M, Casadei L, De Nicola F, Goeman F, Pallocca M, Catena V, Iezzi S, Sorino C, Desantis A, Manetti C, Blandino G, Floridi A, Fanciulli M.
J Exp Clin Cancer Res. 2017 Feb 18;36(1):32. doi: 10.1186/s13046-017-0497-1.

2016

¹H NMR Metabolomic Footprinting Analysis for the In Vitro Screening of Potential Chemopreventive Agents.

Casadei L, Valerio M.

Methods Mol Biol. 2016;1379:89-97. doi: 10.1007/978-1-4939-3191-0_8.

2015

¹H-NMR-Based Metabolomic Study for Identifying Serum Profiles Associated with the Response to Etanercept in Patients with Rheumatoid Arthritis.

Priori R, Casadei L, Valerio M, Scivo R, Valesini G, Manetti C.

PLoS One. 2015 Nov 11;10(11):e0138537. doi: 10.1371/journal.pone.0138537. eCollection 2015.

Cynara scolymus affects malignant pleural mesothelioma by promoting apoptosis and restraining invasion.

Pulito C., Mori F., Sacconi A., Casadei L., et al.

Oncotarget, 2015 Jul 20;6(20):18134-50.

Performance Assessment in Fingerprinting and Multi Component Quantitative NMR Analyses.

Vito Gallo, et al.

Anal Chem. 2015 Jul 7;87(13):6709-17. doi: 10.1021/acs.analchem.5b00919. Epub 2015 Jun 10.

2014

Metformin-induced metabolic reprogramming of chemoresistant ALDHbright breast cancer cells

Cioce M, Valerio M, Casadei L, Pulito C, Sacconi A, Mori F, Biagioni F, Manetti C, Muti P, Strano S, Blandino G.

Oncotarget. 2014 Jun 30;5(12):4129-43.

Metabolomics approach in allergic and rheumatic diseases.

Scivo R, Casadei L, Valerio M, Priori R, Valesini G, Manetti C.

Curr Allergy Asthma Rep. 2014 Jun;14(6):445. doi: 10.1007/s11882-014-0445-5. Review.

2013

Metabolomics in rheumatic diseases: the potential of an emerging methodology for improved patient diagnosis, prognosis, and treatment efficacy.

Priori R, Scivo R, Brandt J, Valerio M, Casadei L, Valesini G, Manetti C. *Autoimmun Rev*. 10:102230 2013

2012

Metformin elicits anticancer effects through the sequential modulation of DICER, microRNA33 and c-MYC.

*G. Blandino, *M. Valerio, *M. Cioce, F. Mori, L. Casadei et al. *Nat Commun*. May 29;3:865 2013

*These authors contributed equally to the work.

CONFERENCES

2016

23.66 Selective Smo-Inhibition Interferes with Cellular Energetic Metabolism in Colorectal Cancer

P. Magistri, F. D'Angelo, M. Valerio, L. Casadei *et al.*
Academic Surgical Congress Abstract 2016

2013

TECHNOLOGY TRENDS innovarsi per competere. Tecnoborsa, Roma, 9 ottobre 2013

Gut microbiota in cystic fibrosis (CF) patients: metabolome unveiled by GCMS-SPME and ¹H-NMR combined technologies. "The Microbiota and Immunity in Human Diseases". Ospedale Pediatrico Bambino Gesù, Roma 3-4 Maggio 2013.

2012

Metabolomica nei Tumori Renali. Corso di nefrologia diagnostica ed interventistica, Treviso 25-26 Ottobre 2012.

2011

Metabolomics analysis of malignant and normal prostate tissues using ¹H-NMR spectroscopy Risonanza Magnetica in Medicina: dalla ricerca tecnologica avanzata alla pratica clinica, Roma 31 Marzo - 1 Aprile 2011.

2009

Kidney cancer biomarkers: identification by using ¹H-NMR-based metabolomic analysis of tissue and urine. "The Second Maga Circe Conference: Metabolomics and Cancer", Anzio 14 -16 Maggio 2009

Metabolomics analysis of malignant and normal prostate tissues using ¹H-NMR spectroscopy. "The Second Maga Circe Conference: Metabolomics and Cancer", Anzio 14 - 16 Maggio 2009.

Optimization of sample preparation and cell extraction for global metabolites analysis. "The Second Maga Circe Conference: Metabolomics and Cancer", Anzio 14 -16 Maggio 2009.

Metabolic effects of a short exposure to low dose of Metformin on breast cancer cell cultures via NMR-based metabolomics. Metabolism and Cancer, American Association for Cancer Research, 13-16 Settembre 2009 San Diego, California, USA.

Multiblock PCA approach for phenotype characterization and application to drug discovery. "Advances in Metabolic Profiling, Barcellona 5 -6 Novembre 2009. 2007
Evaluation of the activities of antitumor drugs in cancer cell lines by ¹H NMRbased metabolomics. Cancer, Cell and Death and Differentiation. XXIII IATMO Conference, Trieste, 19-21 Ottobre 2007

Roma, 20/04/2020

