

Enrica Calura, Ph.D

PERSONAL INFORMATION

- E-mail: enrica.calura@unipd.it, enrica.calura@gmail.com
- Citizenship: Italian

CURRENT POSITION

July 2020 - Today

Position: Researcher 3-year position (Italian position: “*Ricercatore tempo determinato di tipo B*”) equivalent to Assistant Professor. [Web page here](#)

Affiliation: Department of Biology, University of Padua, Italy.

SCIENTIFIC PRODUCTION

I am the author of 31 publications on international peer-reviewed journal.

Ten paper as first author and one as last author.

I published with more than 270 different co-authors, my publications were cited by 741 scientific documents, resulting in an h-index of 16 (Scopus).

ITALIAN “ABILITAZIONE SCIENTIFICA NAZIONALE”

Abilitazioni per Professore Seconda Fascia:

- *Settore Concorsuale 05/E2 **Biologia Molecolare** valido dal 10/04/2017 al 10/04/2023*
- *Settore Concorsuale 05/I1 **Genetica** valido dal 12/04/2017 al 12/04/2023*
- *Settore Concorsuale 05/F1 **Biologia Applicata** valido dal 04/04/2017 al 04/04/2023*
- *Settore Concorsuale 05/E3 **Biochimica Clinica E Biologia Molecolare Clinica** valido dal 05/04/2017 al 05/04/2023.*

TEACHING ACTIVITY

- Academic year 2020/2021 - “Molecular Biology and Genetics of Cancer” Master class in Sanitary and Molecular Biology, University of Padua (48 hours of lesson and 38 hours of practices).
- Academic year 2017/2018 - Lecturer for “Computational biostatistics and bioinformatics” at Faculty of Statistics, Master class in Statistics, University of Padova (24 hours).
- Academic year 2016/2017 - Lecturer for “Computational biostatistics and bioinformatics” at Faculty of Statistics, Master class in Statistics, University of Padova (24 hours).

Teaching assistant:

- Academic year 2015/2016: Bioinformatica e Statistica, Laurea Magistrale Biotecnologie Industriali, Prof. Filippini.
- Academic year 2016/2017: Bioinformatica e Statistica, Laurea Magistrale Biotecnologie Industriali, Prof. Filippini.
- Academic year 2017/2018: Biologia Sintetica Computazionale, Laurea Magistrale Biotecnologie Industriali, Prof. Filippini.
- Academic year 2017/2018: Bioinformatica II, Laurea Triennale Biologia Molecolare, Prof. Romualdi.
- Academic year 2018/2019: Biologia Sintetica Computazionale, Laurea Magistrale Biotecnologie Industriali, Prof. Filippini.
- Academic year 2018/2019: Bioinformatica II, Laurea Triennale Biologia Molecolare, Prof. Romualdi.

EDITORIAL BOARD

- 2020-today: Editor of Network Bioinformatics (Section of Frontiers in Bioinformatics).
- 2019-2020: Associate Editor for Frontiers in Oncology, Special Issue in “Multi-omic Data Integration in Oncology”.
- 2015 - 2020: Editor for Advances in Bioinformatics.

MEMBERSHIP OF SCIENTIFIC SOCIETIES

- *American Association of Cancer Research AACR;*
- *International Society for Computational Biology ISCB;*
- *Italian Cancer Society, SIC.*

GRANTS AND PERSONAL FELLOWSHIP AWARDED

Jan 2020 – Dec 2024

Funding source: “MyFIRST” AIRC Grant from the Italian Association for Cancer Research, MFAG 2019 Id.23522.

Project: “SHOwME-OVC - Spatiotemporal Heterogeneity in Multicellular Ecosystems of Ovarian Cancer at single-cell resolution”.

Role: Principal Investigator.

Funding: 500.000 euro.

May 2018 – July 2018

EMBO fellowship for visiting the Prof. Hautaniemi Lab, University of Helsinki, Finland.

May 2016 – April 2019

Funding source: CARIPLO Foundation, Grant number 2015-0848, Project for Young Researchers.

Project: VIOLeTS - genomic and transcriptomic Variant detection in advanced Ovarian cancer through Longitudinal Surgeries.

Role: Unit Principal Investigator.

Funding: 250.000 euro.

January 2014 – December 2014

Funding source: Annual AIRC Fellowship "Hard Rock Cafe Venice" Ref. 14982, year 2014.

Project: The long and the short of it: non-coding RNAs in Epithelial Ovarian Cancer progression.

Role: Independent Research fellow.

Funding: 30.000 euro.

EDUCATION

January 2010 – December 2012 (3 years)

Position: Ph.D. Student, **PhD in Biosciences and Biotechnologies**, curriculum of Genetics and Developmental Biology at University of Padua, Italy.

Thesis Title: “The integration of Gene and miRNA expression using pathway topology: a case study on epithelial ovarian cancer.”

Supervisor: Prof. Chiara Romualdi, Department of Biology, University of Padua, Italy.

Host Institute: Department of Biology, University of Padua, Italy.

January 2008 – December 2008 (1 year)

Title: **Master in Bioinformatics** at the University of Siena, Siena, Italy.

Thesis: “High fat diet and the transcriptome: cross-species meta-analysis of nutritional expression data.”

Supervisor: Prof. Duccio Cavalieri, Department of Clinical and Preclinical Pharmacology, "Mario Aiazzi Mancini", University of Florence, Florence, Italy.

September 2005 – September 2007 (2 years)

Title: **Master's Degree in Biomolecular and Cellular Sciences** at University of Ferrara, Italy. Final mark: 110/110 cum laude.

Thesis: “Bioinformatics Analysis of gene expression in muscular atrophy.”

Supervisor: Prof. Guido Barbujani, University of Ferrara, Ferrara, Italy.

Co-supervisor: Prof. Chiara Romualdi, University of Padova, Padova, Italy.

September 2001 – March 2005 (3 years)

Title: **Degree in Biological Sciences, Curriculum of Genetics and Informatics** at University of Ferrara, Italy. Final mark: 110/110 cum laude

Thesis: “Effect of natural selection on the human genome: a bioinformatics approach.”

Supervisor: Prof. Guido Barbujani, University of Ferrara, Ferrara, Italy.

Co-supervisor: Prof. Richard Nichols, Queen Mary and Westfield College, University of London, UK.

PREVIOUS RESEARCH POSITIONS

May 2019 – July 2020 **Position:** Postdoctoral Fellow

Project and funding source: “Immunogenomic analyses in ovarian cancers to reveal immune-related subtypes with prognostic relevance”, University of Padua, Italy

Research topic: This project aims to study the immune system through transcriptome data early and advanced ovarian cancers.

Supervisor: Prof. Chiara Romualdi

Host Institute: Department of Biology, University of Padua, Italy.

March 2016 – April 2019 **Position:** Postdoctoral Fellow as project PI

Project and funding source: “VIOLeTS: genomic and transcriptomic Variant detection In advanced Ovarian cancer through Longitudinal Surgeries” funded by CARIPLO Foundation, Grant for Young Researchers.

Research topic: This project aims to study the transcriptome of advanced ovarian cancer samples from longitudinal surgeries, to understand how the mutational and transcriptional landscape evolves during tumor progression.

Host Institute: Department of Biology, University of Padua, Italy.

May-July 2018 Visiting **EMBO Fellowship** at Hautaniemi Lab, Faculty of Medicine, Biomedicum Helsinki, University of Helsinki, Finland.

January 2015 – March 2016 **Position:** Postdoctoral Fellow.

Host Institute: Department of Biology, University of Padua, Italy.

Project and funding source: Predicting tumor development risk by an integral approach linking diet related inflammation to colon cancer, funded by AIRC (a prestigious non-profit association that raises funds for cancer research in Italy). Project P.I.: Dr. Sandra Gessani, Istituto Superiore di Sanità.

Research topic: This project aimed to understand how adipose tissue composition, metabolism and inflammatory status can influence cancer development. We studied the transcriptional profiles of white adipose tissue from healthy and colon cancer patients in the obese and normal-weight condition, looking for an "inflammatory signature" which may be altering the balance between pro- and anti-inflammatory factors.

Supervisors: Dr. Sandra Gessani, Italian National Institute of Health, Rome Italy, and Prof. Chiara Romualdi, Department of Biology, University of Padua, Italy.

January 2014 – December 2014 **Position:** Postdoctoral fellow as project PI

Project and funding source: “The long and the short of it: non-coding RNAs in Epithelial Ovarian Cancer progression” funded by Annual AIRC Fellowship "Hard Rock Cafe Venice" Ref. 14982, year 2014.

Research topic: The project analyzed the gene and miRNA ovarian TCGA data following the procedures developed during the study of early stage of EOC. HGS-EOC samples were studied using the RNAseq technique to generate an EOC lncRNA compendium.

Host Institute: Department of Biology, University of Padua, Italy.

January 2013 – December 2013 **Position:** Postdoctoral Fellow

Project and funding source: “miRNA in regulative networks in pathways: development of new analysis methods and applications” funded by CA.RI.PA.RO. (Regional Foundation for economic and research development), P.I.: Prof. Stefania Bortoluzzi, Department of Molecular Medicine, University of Padua, Italy.

Research topic: The project aimed to develop and apply novel bioinformatic and statistical methods to analyse different sources of experimental data with a systems biology approach, produced with ultra-massive technologies and in strict conjunction with molecular knowledge and clinical information (Calura et al., Blood Cancer Journal 2016).

Supervisors: Prof. Stefania Bortoluzzi, Department of Molecular Medicine, University of Padua, Italy and Prof. Chiara Romualdi, Department of Biology, University of Padua, Italy.

Host Institute: Department of Biology, University of Padua, Italy.

January 2010 – December 2012 **Position:** **PhD in Biosciences and Biotechnologies**, curriculum of Genetics

and Developmental Biology.

Thesis Title: “The integration of Gene and miRNA expression using pathway topology: a case study on epithelial ovarian cancer.”

Research topic: During my PhD I collaborate to the development of a pathway data interpreter, called Graphite, which is able to uniformly store, process and convert pathway information into gene networks (Sales and Calura et al., BMC Bioinformatics 2012). Then, I worked on an extension of the Graphite R package, which is able to integrate microRNAs in pathway topology, providing integrated networks suitable for the topological pathway analyses (Calura et al., NAR 2013). The feasibility of this approach has been validated by studying the early stage of epithelial ovarian cancer, in collaboration with the Mario Negri Institute, Milan, Italy. Our approach successfully guided us towards important biological results with interesting therapeutic implications (Calura et al, Clinical Cancer Research 2012 and Calura et al., Annals Oncology 2016).

Supervisor: Prof. Chiara Romualdi, Department of Biology, University of Padua, Italy.

Host Institute: Department of Biology, University of Padua, Italy.

May 2009 – December 2009 **Position:** Research fellow

Project and funding source: DC-Thera (EU VII Framework Network of Excellence), “Dendritic cells for novel immunotherapies”. Project coordinator: Jonathan M Austyn, Oxford University, Oxford, U.K.

Research topic: The project aimed to study the pathway data formats, and developing a new one, called BCML, to describe, annotate and visualise pathways. BCML can store multiple levels of information, thus permitting a selective view of the pathway as it exists and/or behaves in specific organisms, tissues and cells (Beltrame, Calura et al., Bioinformatics 2010). Using BCML, I worked on the construction and curation of the Dendritic Cell Pathway Atlas (DC-Atlas, Cavalieri et al, Immunome Res. 2010).

Supervisor: Prof. Duccio Cavalieri, Department of Clinical and Preclinical Pharmacology, "Mario Aiazzi Mancini", University of Florence, Florence, Italy.

Host Institute: Department of Clinical and Preclinical Pharmacology, "Mario Aiazzi Mancini", University of Florence, Florence, Italy.

May 2008 – December 2008 **Position:** Research fellow

Project and funding source: NUGO (EU VI Framework Network of Excellence), “The European Nutrigenomics Organisation”.

Research topic: A cross-species meta-analysis of the effects of a high-fat diet compared to a normal diet. The analysis indicated potential gene candidates for the signaling of PPAR-alpha and the involvement of epigenetic mechanisms. The state-of-the-art expression data obtained are of great interest to the scientific community, exploiting the power of in silico analysis filtered by evolutionary conservation (Cavalieri, Calura et al. BMC Genomics 2009).

Supervisor: Prof. Duccio Cavalieri, Department of Clinical and Preclinical Pharmacology, "Mario Aiazzi Mancini", University of Florence, Florence, Italy.

Host Institute: Department of Clinical and Preclinical Pharmacology, "Mario Aiazzi Mancini", University of Florence, Florence, Italy.

ACTIVE COLLABORATIONS

- Prof. Sampsa Hautaniemi, Professor at University of Helsinki, Finland. I’m collaborating with Prof. Hautaniemi to study single cell transcription in ovarian cancer. I’m currently visiting the Hautaniemi Lab thanks to a short EMBO fellowship.
- Dr. Maurizio D’Incalci, Head of the Department of Oncology at the Mario Negri Institute. Since 2009 I have been collaborating with D’Incalci’s group to study the transcriptional and post-transcriptional regulatory alteration in early and late stage epithelial ovarian cancer.
- Dr. Sandra Gessani, Istituto Superiore di Sanità. I have been collaborating with Dr. Sandra Gessani since 2009 when I was in University of Florence participating in the EU framework project of excellence DC-Thera studying the Dendritic cells pathways. Now I work with Dr. Gessani to study the cross-talk between diet-related inflammation and the risk of developing colon cancer using system medicine approaches.
- Prof. Keisuke Ito, Associate Professor at the Albert Einstein College of Medicine, New York, USA. With Prof. Ito, I’m currently collaborating on the integrated analysis of gene expression and metabolite abundances to understand the regulatory pathways controlling differentiation in stem cells.

SELECTED TALKS AT INTERNATIONAL CONFERENCES

- EMBO | EMBL *Symposium: From Single- to Multiomics: Applications and Challenges in Data Integration*, 12-14 November 2017, Heidelberg, Germany. Flash talk: Off the beaten pathways.
- Federation of European Biochemical Society - *FEBS workshop: Decoding non-coding RNAs in development and cancer*", 12-15 October 2014, Capri, Italy.
- *European Conference of Computational Biology 2014 - ECCB14*, 07-10 September 2014, Strasbourg, France. *Highlight Talk*: HP01 - Wiring miRNAs to pathways: a topological approach to integrate miRNA and mRNA expression profiles.
- *56th Annual Meeting of the Italian Cancer Society* - Ferrara, 11-13 September 2014, Italy.
- *SIICA14 - National Conference of the Italian Society of immunology, Clinical Immunology and Allergology*, 28-31 May 2014, Firenze, Italy.
- *Computational Biology & Innovation*, 6-7 December 2011, University College Dublin, Dublin, Ireland.

ALL PUBLICATIONS LIST IN REVERSE CHRONOLOGICAL ORDER

31. Finotello F, Calura E, Risso D, Hautaniemi S, Romualdi C.

Editorial: Multi-omic Data Integration in Oncology.

Front Oncol. 2020 Sep 15;10:1768. doi:10.3389/fonc.2020.01768. PMID: 33042824; PMCID: PMC7522593.

30. Tait S, Baldassarre A, Masotti A, Calura E, Martini P, Vari R, Scazzocchio B, Gessani S, Del Cornò M. Integrated Transcriptome Analysis of Human Visceral Adipocytes Unravels Dysregulated microRNA-Long Non-coding RNA-mRNA Networks in Obesity and Colorectal Cancer.

Front Oncol. 2020 Jul 2;10:1089. doi: 10.3389/fonc.2020.01089. PMID: 32714872; PMCID: PMC7351520.

29. Benvenuto G, Todeschini P, Paracchini L, Calura E, Fruscio R, Romani C, Beltrame L, Martini P, Ravaggi A, Ceppi L, Sales G, Donati F, Perego P, Zanotti L, Ballabio S, Grassi T, Delle Marchette M, Tognon G, Sartori E, Adorni M, Odicino F, D'Incalci M, Bignotti E, Romualdi C, Marchini S.

Expression profiles of PRKG1, SDF2L1 and PPP1R12A are predictive and prognostic factors for therapy response and survival in high-grade serous ovarian cancer.

Int J Cancer. 2020 Jul 15;147(2):565-574. doi: 10.1002/ijc.32935. Epub 2020 Mar 13. PMID: 32096871.

28. Calura E, Ciciani M, Sambugaro A, Paracchini L, Benvenuto G, Milite S, Martini P, Beltrame L, Zane F, Fruscio R, Marchette MD, Borella F, Tognon G, Ravaggi A, Katsaros D, Bignotti E, Odicino F, D'Incalci M, Marchini S, Romualdi C.

Transcriptional Characterization of Stage I Epithelial Ovarian Cancer: A Multicentric Study.

Cells. 2019 Dec 1;8(12):1554. doi: 10.3390/cells8121554. PMID: 31805750; PMCID: PMC6952972.

27. Palumbo E, Piotto C, Calura E, Fasanaro E, Groff E, Busato F, El Khouzai B, Rigo M, Baggio L, Romualdi C, Zafiroopoulos D, Russo A, Mognato M, Corti L.

Individual Radiosensitivity in Oncological Patients: Linking Adverse Normal Tissue Reactions and Genetic Features.

Front Oncol. 2019 Oct 1;9:987. doi: 10.3389/fonc.2019.00987. PMID: 31632918; PMCID: PMC6779824.

26. Martini P, Chiogna M, Calura E*, Romualdi C*.

MOSClip: multi-omic and survival pathway analysis for the identification of survival associated gene and modules.

Nucleic Acids Res. 2019 May 3. pii: gkz324. doi: 10.1093/nar/gkz324. [Epub ahead of print] PubMed PMID: 31049575.

*Co-last authors

25. Ballabio S, Craparotta I, Paracchini L, Mannarino L, Corso S, Pezzotta MG, Vescio M, Fruscio R, Romualdi C, Dainese E, Ceppi L, Calura E, Pileggi S, Siravegna G, Pattini L, Martini P, Delle Marchette M, Mangioni C, Ardizzoia A, Pellegrino A, Landoni F, D'Incalci M, Beltrame L, Marchini S.

Multisite analysis of high-grade serous epithelial ovarian cancers identifies genomic regions of focal and recurrent copy number alteration in 3q26.2 and 8q24.3.

Int J Cancer. 2019 Mar 20. doi: 10.1002/ijc.32288. [Epub ahead of print] PubMed PMID: 30892690.

- 24.** Del Cornò M, Baldassarre A, Calura E, Conti L, Martini P, Romualdi C, Vari R, Scazzocchio B, D'Archivio M, Masotti A, Gessani S.
Transcriptome Profiles of Human Visceral Adipocytes in Obesity and Colorectal Cancer Unravel the Effects of Body Mass Index and Polyunsaturated Fatty Acids on Genes and Biological Processes Related to Tumorigenesis.
Front Immunol. 2019 Feb 19;10:265. doi:10.3389/fimmu.2019.00265. eCollection 2019. PubMed PMID: 30838002; PubMed Central, PMCID: PMC6389660.
- 23.** Sales G, Calura E, Romualdi C.
metaGraphite-a new layer of pathway annotation to get metabolite networks. Bioinformatics. 2019 Apr 1;35(7):1258-1260. doi:10.1093/bioinformatics/bty719. PubMed PMID: 30184047.
- 22.** Sales G, Deagle BE, Calura E, Martini P, Biscontin A, De Pitta C, Kawaguchi S, Romualdi C, Meyer B, Costa R, Jarman S.
KrillDB: A de novo transcriptome database for the Antarctic krill (*Euphausia superba*).
PLoS One 2017 Feb 10;12(2):e0171908. doi:10.1371/journal.pone.0171908. eCollection 2017.
- 21.** Todeschini P, Salviato E, Paracchini L, Ferracin M, Petrillo M, Zanotti L, Tognon G, Gambino A, Calura E, Caratti G, Martini P, Beltrame L, Maragoni L, Gallo D, Odicino FE, Sartori E, Scambia G, Negrini M, Ravaggi A, D'Incalci M, Marchini S, Bignotti E, Romualdi C.
Circulating miRNA landscape identifies miR-1246 as promising diagnostic biomarker in high-grade serous ovarian carcinoma: A validation across two independent cohorts.
Cancer Lett. 2017 Mar 1;388:320-327. doi: 10.1016/j.canlet.2016.12.017.
- 20.** Martini P, Paracchini L, Caratti G, Mello-Grand M, Fruscio R, Beltrame L, Calura E, Sales G, Ravaggi A, Bignotti E, Odicino FE, Sartori E, Perego P, Katsaros D, Craparotta I, Chiorino G, Cagnin S, Mannarino L, Ceppi L, Mangioni C, Ghimenti C, D'Incalci M, Marchini S, Romualdi C.
lncRNAs as Novel Indicators of Patients' Prognosis in Stage I Epithelial Ovarian Cancer: A Retrospective and Multicentric Study.
Clin Cancer Res. 2017 May 1;23(9):2356-2366. doi: 10.1158/1078-0432.CCR-16-1402.
- 19.** Calura E, Pizzini S, Bisognin A, Coppe A, Sales G, Gaffo E, Fanelli T, Mannarelli C, Zini R, Norfo R, Pennucci V, Manfredini R, Romualdi C, Guglielmelli P, Vannucchi AM, Bortoluzzi S.
A data-driven network model of primary myelofibrosis: transcriptional and post-transcriptional alterations in CD34+ cells.
Blood Cancer J. 2016 Jun 24;6(6):e439. doi: 10.1038/bcj.2016.47.
- 18.** Calura E, Paracchini L, Fruscio R, DiFeo A, Ravaggi A, Peronne J, Martini P, Sales G, Beltrame L, Bignotti E, Tognon G, Milani R, Clivio L, Dell'Anna T, Cattoretti G, Katsaros D, Sartori E, Mangioni C, Ardighieri L, D'Incalci M, Marchini S, Romualdi C.
A prognostic regulatory pathway in stage I epithelial ovarian cancer: new hints for the poor prognosis assessment.
Ann Oncol. 2016 Aug;27(8):1511-9. doi: 10.1093/annonc/mdw210.
- 17.** Calura E, Bisognin A, Manzoni M, Todoerti K, Taiana E, Sales G, Morgan GJ, Tonon G, Amodio N, Tassone P, Neri A, Agnelli L, Romualdi C, Bortoluzzi S.
Disentangling the microRNA regulatory milieu in multiple myeloma: integrative genomics analysis outlines mixed miRNA-TF circuits and pathway-derived networks modulated in t(4;14) patients.
Oncotarget. 2016 Jan 19;7(3):2367-78. doi: 10.18632/oncotarget.6151.
- 16.** Beltrame L, Di Marino M, Fruscio R, Calura E, Chapman B, Clivio L, Sina F, Mele C, Iatropoulos P, Grassi T, Fotia V, Romualdi C, Martini P, Noris M, Paracchini L, Craparotta I, Petrillo M, Milani R, Perego P, Ravaggi A, Zambelli A, Ronchetti E, D'Incalci M, Marchini S.
Profiling cancer gene mutations in longitudinal epithelial ovarian cancer biopsies by targeted next-generation sequencing: a retrospective study.

Ann Oncol. 2015 Jul;26(7):1363-71. doi: 10.1093/annonc/mdv164.

15. Della Vittoria Scarpati G, Calura E, Di Marino M, Romualdi C, Beltrame L, Malapelle U, Troncone G, De Stefano A, Pepe S, De Placido S, D'Incalci M, Marchini S, Carlomagno C.
Analysis of differential miRNA expression in primary tumor and stroma of colorectal cancer patients.
Biomed Res Int. 2014;2014:840921. doi: 10.1155/2014/840921.

14. Martini P, Sales G, Calura E, Cagnin S, Chiogna M, Romualdi C.
timeClip: pathway analysis for time course data without replicates.
BMC Bioinformatics. 2014;15 Suppl 5:S3. doi: 10.1186/1471-2105-15-S5-S3.

13. Girardi C, De Pitta C, Casara S, Calura E, Romualdi C, Celotti L, Mognato M.
Integration analysis of microRNA and mRNA expression profiles in human peripheral blood lymphocytes cultured in modeled microgravity.
Biomed Res Int. 2014;2014:296747. doi: 10.1155/2014/296747.

12. Calura E, Martini P, Sales G, Beltrame L, Chiorino G, D'Incalci M, Marchini S, Romualdi C.
Wiring miRNAs to pathways: a topological approach to integrate miRNA and mRNA expression profiles.
Nucleic Acids Res. 2014 Jun;42(11):e96. doi: 10.1093/nar/gku354.

11. Martini P, Sales G, Calura E, Brugiolo M, Lanfranchi G, Romualdi C, Cagnin S.
Systems biology approach to the dissection of the complexity of regulatory networks in the S. scrofa cardiocirculatory system.
Int J Mol Sci. 2013 Nov 21;14(11):23160-87. doi: 10.3390/ijms141123160.

10. Fabbro A, Sucapane A, Toma FM, Calura E, Rizzetto L, Carrieri C, Roncaglia P, Martinelli V, Scaini D, Masten L, Turco A, Gustincich S, Prato M, Ballerini L.
Adhesion to carbon nanotube conductive scaffolds forces action-potential appearance in immature rat spinal neurons.
PLoS One. 2013 Aug 12;8(8):e73621. doi: 10.1371/journal.pone.0073621. eCollection 2013.

9. Calura E, Fruscio R, Paracchini L, Bignotti E, Ravaggi A, Martini P, Sales G, Beltrame L, Clivio L, Ceppi L, Di Marino M, Fuso Nerini I, Zanotti L, Cavalieri D, Cattoretti G, Perego P, Milani R, Katsaros D, Tognon G, Sartori E, Pecorelli S, Mangioni C, D'Incalci M, Romualdi C, Marchini S.
MiRNA landscape in stage I epithelial ovarian cancer defines the histotype specificities.
Clin Cancer Res. 2013 Aug 1;19(15):4114-23. doi: 10.1158/1078-0432.CCR-13-0360.

8. Sales G, Calura E, Martini P, Romualdi C.
Graphite Web: Web tool for gene set analysis exploiting pathway topology.
Nucleic Acids Res. 2013 Jul;41(Web Server issue):W89-97. doi: 10.1093/nar/gkt386.

7. Uboldi S, Calura E, Beltrame L, Fuso Nerini I, Marchini S, Cavalieri D, Erba E, Chiorino G, Ostano P, D'Angelo D, D'Incalci M, Romualdi C.
A systems biology approach to characterize the regulatory networks leading to trabectedin resistance in an in vitro model of myxoid liposarcoma.
PLoS One. 2012;7(4):e35423. doi: 10.1371/journal.pone.0035423.

6. Sales G*, Calura E*, Cavalieri D, Romualdi C.
graphite - a Bioconductor package to convert pathway topology to gene network.
BMC Bioinformatics. 2012 Jan 31;13:20. doi: 10.1186/1471-2105-13-20.

* contributed equally to this work.

5. Beltrame L*, Calura E*, Popovici RR, Rizzetto L, Guedez DR, Donato M, Romualdi C, Draghici S, Cavalieri D.
The Biological Connection Markup Language: a SBGN-compliant format for visualization, filtering and analysis of biological pathways.

Bioinformatics. 2011 Aug 1;27(15):2127-33. doi: 10.1093/bioinformatics/btr339.

* contributed equally to this work.

4. Marchini S, Cavalieri D, Fruscio R, Calura E, Garavaglia D, Fuso Nerini I, Mangioni C, Cattoretti G, Clivio L, Beltrame L, Katsaros D, Scarampi L, Menato G, Perego P, Chiorino G, Buda A, Romualdi C, D'Incalci M. Association between miR-200c and the survival of patients with stage I epithelial ovarian cancer: a retrospective study of two independent tumour tissue collections.

Lancet Oncol. 2011 Mar;12(3):273-85. doi: 10.1016/S1470-2045(11)70012-2.

3. Cavalieri D, Rivero D, Beltrame L, Buschow SI, Calura E, Rizzetto L, Gessani S, Gauzzi MC, Reith W, Baur A, Bonaiuti R, Brandizi M, De Filippo C, D'Oro U, Draghici S, Dunand-Sauthier I, Gatti E, Granucci F, Gundel M, Kramer M, Kuka M, Lanyi A, Melief CJ, van Montfoort N, Ostuni R, Pierre P, Popovici R, Rajnavolgyi E, Schierer S, Schuler G, Soumelis V, Splendiani A, Stefanini I, Torcia MG, Zanoni I, Zollinger R, Figdor CG, Austyn JM.

DC-ATLAS: a systems biology resource to dissect receptor specific signal transduction in dendritic cells.

Immunome Res. 2010 Nov 19;6:10. doi: 10.1186/1745-7580-6-10.

2. Cavalieri D*, Calura E*, Romualdi C, Marchi E, Radonjic M, Van Ommen B, Muller M.

Filling gaps in PPAR-alpha signaling through comparative nutrigenomics analysis.

BMC Genomics. 2009 Dec 11;10:596. doi: 10.1186/1471-2164-10-596.

* contributed equally to this work.

1. Calura E, Cagnin S, Raffaello A, Laveder P, Lanfranchi G, Romualdi C.

Meta-analysis of expression signatures of muscle atrophy: gene interaction networks in early and late stages.

BMC Genomics. 2008 Dec 23;9:630. doi: 10.1186/1471-2164-9-630.