

## Curriculum Vitae of ALESSANDRO CARRER

MSc, Dr, PhD, Principal Investigator

Veneto Institute of Molecular Medicine (VIMM), via Orus, 2 – 35129 Padova (PD)

Email: [alessandro.carrer@vimm.it](mailto:alessandro.carrer@vimm.it)

ORCID: 0000-0002-9300-6879

### Education

- 2009 Ph.D. in Molecular Medicine: University of Trieste and International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy  
Grade: no grade at defense. Title: Dottore di Ricerca in Medicina Molecolare
- 2004 MSc Biotechnology: University of Trieste, Trieste, Italy  
Grade: 110 cum laudae

### Work Experience

- 2022-present Tenure-track Assistant Professor (RTDb), Department of Biology, University of Padova, Padua, Italy
- 2020-2022 MSCA Fellow, Department of Biology, University of Padova, Padua, Italy
- 2019-present Principal Investigator, Veneto Institute for Molecular Medicine (VIMM), Padua, Italy  
 I am currently interested in the role of cellular metabolism in pancreatic carcinogenesis, through regulation of the nuclear epigenome and/or other signaling pathways.
- 2018-2019 Research Associate, Cancer Biology Department, University of Pennsylvania
- 2013-2017 Postdoctoral Fellow, Cancer Biology Department, UPenn. *Mentor: Prof. Kathryn Wellen*  
 I generated a conditional knock-out mouse model for the acetyl-CoA-producing enzyme ACLY (phenotype described in multiple high-impact publications). I focused my research on pancreatic cancer and became familiar with autochthonous mouse models of pancreatic carcinogenesis ("KC" and "KPC" mice). I mastered the use of primary organoid culture for the study of the biology of acinar cells. I engaged in several fruitful collaboration that carried over to my independent research. During my time in the Wellen laboratory I co-authored 10 publications (4 first-authorships).
- 2009-2012 Postdoctoral Fellow, Molecular Medicine Laboratory at ICGEB, Trieste, Italy. *Mentor: Dr. Mauro Giacca*  
 After my graduation, I spent 2 years as a postdoctoral fellow in the laboratory of Molecular Medicine (PI: Prof. Mauro Giacca), being involved in tumor-related projects in the lab. During my time in the Giacca laboratory, I co-authored 5 publications (2 first-authorships).
- 2005-2009 Ph.D. student, Molecular Medicine laboratory at ICGEB, Trieste, Italy. *Mentor: Dr. Mauro Giacca*  
 I was trained in the laboratory of Molecular Medicine (PI: Prof. Mauro Giacca), working the identification of a novel population of tumor-infiltrating monocytes expressing Neuropilin-1. I found that these cells promote tumor blood vessel normalization, improves perfusion and alleviates hypoxia thus slowing tumor growth. Data were published in Cancer Research in 2012.
- 2004 Intern at International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste, Italy *Mentor: Dr. Serena Zacchigna*
- 2003 Intern at IRCSS Burlo Garofolo Children Hospital, Trieste, Italy. *Mentor: Dr. Tarcisio Not*

## Scholarships and Awards

- 2020 Marie Skłodowska-Curie Action (MSCA) Fellowship: Project OPEN P-CAN
- 2019 Seal of Excellence – MSCA Fellowships Program
- 2018 INROAd mobility award – University of Pavia
- 2018 AIRC iCARE-2 Fellowship (EU Cofund program)
- 2017 Travel Award – International Society Cancer Metabolism
- 2011 Scholar-In-Training Award at AACR Conference on Tumor Microenvironment Complexity, Orlando.
- 2010 Scholar-In-Training Award at MRS-AACR Conference on Metastasis and Tumor Microenvironment, Philadelphia.
- 2008 “AtaxiaUK” long-term fellowship. Project entitled “Is DNA replication origin positioning involved in triplet expansion diseases?”.

## ASN – Abilitazione Scientifica Nazionale

Abilitato (seconda fascia) / Qualified (Associate Professor-level):

<u>Settore Concorsuale</u>	<u>SSD</u>	<u>Starting:</u>
05/E1	BIO/10	2022
05/E2	BIO/11	2019
05/H2	BIO/17	2020

## Teaching Activities

- 2023 – present Metabolism and Metabolomics (*CCS Molecular Biology; LM in Molecular Biology*)
- 2022 – present Laboratory of Biochemistry (*CCS Biologia; Curriculum: MOLECULAR BIOLOGY*)
- 2022 – present Fundamentals of Biology (*CCS Biologia; Curriculum: BIOLOGY*)
- 2020 – present Tumor Metabolism segment (Tumor Biology Class; Master program in Medical Biotechnology, University of Padova)
- 2021 Member, Evaluating committee of the PhD program “Biomedical and Oncological Sciences” – University of Torino – XXXII cycle

## Institutional Responsibilities

- 2019-present Faculty member, Principal Investigator, VIMM, Padova, Italy
- 2019-present Coordinator of Trainee Seminar Series, VIMM, Padova, Italy
- 2020-present Board of Directors, International Society for Cancer Metabolism (ISCaM)
- 2021-present Executive Board, Italian Pancreatic Cancer Community (I-PCC)
- 2022-present Trust for Communication and Dissemination, Department of Biology, UniPD

## Funding

- 2023-2025 Research Grant – Multiround Call (#2), Telethon Foundation: *Dissecting the role of cytoplasmic signaling metabolites in Niemann-Pick disease type C* (Project ID# GMR23T1060)  
 Role: PI € 160000 for 24 months

- 2022-2023 Seed Grant, World Cancer Research Fund (WCRF): *Do sweetened beverages promote pancreatic cancer risk? Interrogating metabolic alterations induced by dietary fructose* (Project ID# 2021-1769)  
Role: PI £ 64000 for 18 months
- 2021-2022 Transnational Access (TNA) Projects from EASI Genomics: *Dissecting epigenetic and cellular memory of inflammation to improve pancreatic cancer prevention* (Project ID#: 15158)  
Role: PI covers sequencing costs (worth ca. € 50000)
- 2020-2024 My First AIRC Grant, Italian Association for Cancer Research (AIRC): *Interrogating metabolic and epigenetic reprogramming in pancreatic cancer initiation* (Project ID#: 23029)  
Role: PI € 500000 for 5 years
- 2019-2022 iCARE Fellowship from Italian Association for Cancer Research (AIRC): *Metabolically-regulated epigenetic landscape in pancreatic cancer initiation* (Project ID#: 22550)  
Role: Fellow – declined in 2020 € 165000 for 3 years
- 2020-2022 R21 grant, National Cancer Institute (NCI): *Interrogating mitochondria-to-nucleus communication in pancreatic cancer initiation* (Project ID#: 1R21CA244025)  
Role: Co-I \$ 250000 for 2 years
- 2020-2023 Research Grant, the WorldWide Cancer Research Foundation (WWCR): *Mitochondria-to-nucleus communication in pancreatic cancer* (Project ID#: 20-0188)  
Role: PI £ 275000 for 3 years
- 2020-2022 Individual Fellowship from EU-MSCA: *OPEN P-CAN, OPA1 educates the nucleus in pancreatic cancer* (Project ID#: 894289)  
Role: Fellow € 180000 for 2 years

## Professional Activities

### COMMISSIONS OF TRUST

- 2020 – present Board of Directors, *International Society of Cancer Metabolism (ISCaM)*
- 2019 – present Review Board, Molecular and Cellular Biology sections, *Frontiers in Oncology*
- 2019 – present External Review panel, ICGEB-CRP Research Grant Programme
- 2020 – present Advisory Board Member, *Translational Oncology* (Elsevier; ISSN: 1936-5233)
- 2020 – present External Reviewer, WorldWide Cancer Research Program
- 2021 – present External Evaluator UNA4CAREER (EU COFUND, Univ Complutense de Madrid)
- 2023 – present Expert, UNCAN.eu initiative
- 2019 – present Ad hoc Reviewer: *Nucleic Acid Research* (ISSN: 0305-1048); *Oncotarget* (ISSN: 1949-2553); *Scientific Reports* (ISSN: 0245-2322); *Int. J. Science* (ISSN: 2278-3687); *Cancers* (ISSN: 2072-6694); *EMBO Reports* (ISSN: 1469-3178); *EMBO J* (ISSN: 1460-2075); *Cell Death & Diff.* (1350-9047); *PNAS* (0027-8424).

### MEMBERSHIP OF SCIENTIFIC SOCIETIES

- 2022 - present Member, *Società Italiana di Biochimica (SIB)*
- 2021 - present Founding Member, *Italian Pancreatic Cancer Community (IPCC)*
- 2020 - present Member, *European Association of Cancer Research (EACR)*
- 2020 - present Member, *Società Italiana di Cancerologia (SIC)*
- 2019 – present Member, *Società Italiana di Biofisica e Biochimica Molecolare (SIBBM)*

- 2017 – present Board of Directors and President Elect, *International Society of Cancer Metabolism (ISCaM)*  
 2010 – present Associate Member, *American Association of Cancer Research (AACR)*

### **ORGANIZATION OF SCIENTIFIC MEETINGS**

- 2018 Organizing Committee Member for the 3<sup>rd</sup> International Conference on Pancreatic Cancer and Liver Diseases, Rome, Italy (1-3 October, 2018)  
 2021 Organizer, 8<sup>th</sup> Annual Meeting – ISCaM Webinar Series, International Society of Cancer Metabolism (ISCaM), Virtual (September 2021)  
 2022 Scientific Committee, 9<sup>th</sup> Annual Meeting, International Society of Cancer Metabolism (ISCaM), Turin, Italy (29 June – 02 July, 2022)

### **MAJOR COLLABORATIONS**

- Rohit Chandwani, MD, PhD, *Epigenome sequencing of tumor-initiation*; Dpt of Cell and Developmental Biology, and Surgery, at Weill Cornell Medical College, New York (USA)  
Nathaniel Snyder, PhD, *Acyl-CoA species quantification in biological systems*; Center for Metabolic Disease Research, Temple University, Philadelphia (USA)  
Rushika Perera, PhD, *Pancreatic Tumor Microenvironment*; UCSF, San Francisco (USA)  
Roberto Zoncu, PhD, *Cholesterol-mediated signaling*; UC Berkeley, San Francisco (USA)  
Anna Gukovskaya, PhD, *Cholesterol trafficking and signaling*; UCLA, Los Angeles (USA)  
Alessandro Gardini, PhD, *Epigenomic analysis of cell fate*, Wistar Institute, Philadelphia (USA)  
Simone Sidoli, PhD, *MS-based interrogation of metabolic-dependent histone marks*; Proteomic Core, Albert Einstein College of Medicine, New York (USA)  
Kostantinos Lefkimmatis, PhD, *Cholesterol-regulated PKA signaling*; VIMM and Dpt. Of Physiology, University of Pavia (IT)  
Claudio Santi, PhD, *Seleno compounds in PDA therapy*; Dpt of Pharmacology, University of Perugia  
Valerio Voliani, PhD, *Nanoparticles for drug delivery*; Italian Institute of Technology (IIT), Pisa  
Sophie Trefely, PhD, *Acetyl-CoA compartmentalization in aging*; Babraham Institute, Cambridge (UK)

### **Invited Lectures**

- 2008 *Selected Speaker*, Annual Meeting, European Society of Gene and Cell Therapy, Brugge, Belgium (*Short Talk*)  
 2010 *Selected Speaker*, MRS-AACR Conference on “Metastasis and Tumor Microenvironment”, Philadelphia, PA. (*Short Talk*)  
 2012 Frontiers in Cardiac and Vascular Regeneration, Trieste, Italy.  
 2012 *Selected Speaker*, FEBS Workshop on Molecular and Cellular Mechanism of Angiogenesis, Capri, Italy. (*Short Talk*)  
 2015 *Selected Speaker*, AACR Special Conference on Chromatin and Epigenetics in Cancer, Atlanta, GA. (*Short Talk*)  
 2017 *Selected Speaker*, Annual Meeting, International Society of Cancer Metabolism (ISCaM), Bertinoro, Italy  
 2018 *Guest Speaker*, VIMM, Padua, Italy  
 2018 *Guest Speaker*, Humanitas Medical School, Milan, Italy  
 2018 *Invited Speaker*, Hormel Cancer Institute, Austin, MN  
 2018 *Invited Speaker*, University of Pavia – Molecular Biology Department, Pavia, Italy  
 2018 *Invited Speaker*, University of Milano Bicocca  
 2019 *Invited Speaker*, Molecular Biotechnology Center, University of Turin  
 2019 *Selected Speaker*, ABCD Meeting (Italian Association of Cell Biology and Differentiation), Bologna - *declined*

- 2019 *Invited Speaker*, EpiGeneSys 2019, Crick Institute, London, UK  
 2019 *Invited Speaker*, University of Coimbra, PT  
 2019 *Speaker*, Annual Meeting, International Society of Cancer Metabolism (ISCaM), Braga, PT  
 2020 *Invited Speaker*, ASPET Annual Meeting in Experimental Biology, San Diego (USA) – *cancelled due to COVID19 pandemic*  
 2021 *Invited Speaker*, Metabolism Meets Function, Florence, IT  
 2021 *Invited Speaker*, International Center for Genetic Engineering and Biotechnology, Trieste, Italy  
 2021 *Invited Speakers*, “Epigenetic Mondays”, CIBIO, Trento, Italy  
 2021 *Invited Speaker*, 33<sup>th</sup> Annual Meeting - Associazione Italiana Culture Cellulari (AICC), Torino, Italy  
 2022 *Selected Speaker*, IUBMB/FEBS Meeting on “Crosstalk between Nucleus and Mitochondria in Health and Disease”, Sevilla, Spain  
 2023 *Invited Speaker*, EMBO Lecture Course on “Tumor metabolism: current understanding and opportunities for novel drug discovery”, Noida, India

## Graduate Students trained and their current positions

Prior to establishing my own group, I actively trained 5 PhD students and 1 postdoctoral fellow: Silvia Moimas, PhD, currently: Research Staff at ETH Zurich (CH); Myriam Kazemi, PhD, currently: Staff at Verona Hospital; Steven Zhao, PhD, currently: Postdoc at Salk Institute; Robert Norgard, PhD, currently: postdoc at Boehringer; Kollin C. Schultze, currently: graduate research assistant at University of Pennsylvania; Joshua S.L. Parris, MSc, currently: postdoc at Janssen Oncology  
 Notable trainees in my lab at VIMM have been:

### Postdocs

2020 – present                      Marco Fantuz, MSc, PhD

### PhD Students

2019 - present                      Carlotta Paoli, Msc – PhD candidate in Biosciences, University of Padova  
 2022 - present                      Beatrice Calciolari, Msc – PhD candidate in Biosciences, University of Padova  
 2022 – present                      Martina Spacci, Msc – PhD candidate in Biosciences, University of Padova

### Fellows (Postbacs and “Borsisti”)

2020 – 2021                      Alessia Atella, MSc  
 2021 – 2022                      Beatrice Calciolari, MSc  
 2022 – present                      Roberta Noè, Msc

### Students

2019 – 2022                      Martina Spacci  
 2020 - 2021                      Thauan Serafini  
 2021 - 2022                      Arianna Picco  
 2021 - 2022                      Noemi Inglese  
 2023 – present                      Giulia Milan  
 2023 – present                      Giovanni Fontana

## Professional Skills

- ☐ Standard molecular biology techniques (DNA/RNA/protein extraction, PCR, qPCR, Western blotting, cell/tissue culture, cell proliferation assays)
- ☐ *In vivo* animal model (rodents handling, mouse colony organization, small surgery, injection of viral vectors, tissue harvesting); *In vivo* drug delivery: i.p. injections, i.v. injection, gavage
- ☐ Handling, breeding and analysis of transgenic mouse models of pancreatic carcinogenesis (KC; KPC and similar)
- ☐ Xenograft tumor models: injection, measurements, handling, tissue harvesting and processing

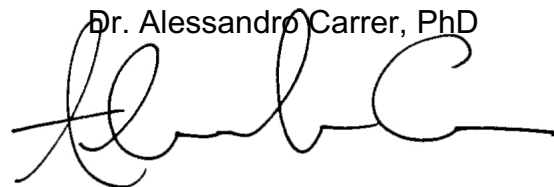
- ☐ Immunohistochemistry / Immunofluorescence (on tissues, cells)
- ☐ Chromatin Immuno-precipitation
- ☐ Histone modifications analysis (histone extraction, western blotting for histone marks, sample preparation for and analysis of, mass spect data)
- ☐ Organoid culture (primary pancreatic acinar cells): preparation, culture, imaging, staining, biochemical assays
- ☐ Next-gen library preparation (RNA-Seq; ChIP-Seq; ATAC-Seq)
- ☐ Basic bioinformatics analysis (genome mapping; gene/promoter/enhancer annotation; GSEA; UMAP calculation; gene ontology analysis)
- ☐ Basic metabolic assays (nutrient consumption, metabolite extraction for mass spectrometry, carbon-tracing)
- ☐ Assessment of vascular perfusion (Evans' blue perfusion assay, ultrasound-based assays, doxorubicin/dextran extravasation)
- ☐ Cell migration/adhesion assays
- ☐ Flow cytometry: staining of cell lines, isolation and staining of bone marrow-derived cells, characterization of immune infiltrates. Experience with multiple FACS machines
- ☐ Bone marrow-derived cell isolation, culture, and staining

**Autorizzazione privacy**

*Autorizzo il trattamento dei dati personali presenti nel curriculum vitae ai sensi del d.lgs 101/2018 e del Regolamento UE 2016/679 Relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali nonché alla libera circolazione di tali dati, che abroga la Direttiva 95/46/CE Regolamento generale sulla protezione dei dati, ai fini della procedura per la quale il CV è stato presentato.*

*Padova, 19 Gennaio 2023*

Dr. Alessandro Carrer, PhD



## Publications

Bibliometric parameters:

Publications: 23 (7 first-author; 5 corresponding author; active IF: 97,215)

Citations (*per WoS*): 1839 (1493 without self citations); Papers with >100 citations: 7; Papers with >200 citations: 4; WoS - "Highly Cited Papers": 2

H-index: 14

List: (underscores denote my contribution, in **bold** first-authorships, \* for senior authorship)

Zacchigna S, Papa G, Antonimi A, Novati F, Moimas S, Carrer A, Arsic N, Zentilin L, Visintini V, Pascone M, Giacca M, *Improved survival of ischemic cutaneous and musculocutaneous flaps after vascular endothelial growth factor gene transfer using adeno- associated virus vectors*, **Am. J. Pathol.**, 2005

Zacchigna S, Pattarini L, Zentilin L, Moimas S, Carrer A, Sinigaglia M, Arsic N, Tafuro S, Sinagra G, Giacca M, *Bone marrow cells recruited through the neuropilin-1 receptor promote arterial formation at the sites of adult neoangiogenesis*, **J. Clin. Invest.**, 2008

Carrer A, Zacchigna S, Balani A, Pistan V, Adami A, Porcelli F, Scaramucci M, Roteano M, Turoldo A, Prati MC, Dell'Omodarme M, De Manzini N, Giacca M, *Expression profiling of angiogenic genes for the characterisation of colorectal carcinoma*, **Eur J Cancer**, 2008

Carrer A, Giacca Mas, Giacca Mau, Chapter 4: *Molecular Parameters for Prognostic and Predictive Assessment of Colorectal Cancer – Rectal Cancer. Strategies and Techniques*, Springer (BOOK)

Carrer A, Moimas S, Zacchigna S, Pattarini L, Zentilin L, Ruozi G, Mano M, Sinigaglia M, Maione F, Serini G, Giraudo E, Bussolino F, Giacca M, *Neuropilin-1 identifies a subset of Gr1- monocytes that can induce tumor vessel normalization and inhibit tumor growth*, **Cancer Res**, 2012

Carrer A, Lee JV, Shah S, Snyder NW, Wei S, Venneti S, Worth AJ, Yuan ZF, Lim HW, Liu S, Jackson E, Aiello NM, Haas NB, Rebbeck TR, Judkins A, Won KJ, Chodosh LA, Garcia BA, Stanger BZ, Feldman MD, Blair IA, Wellen KE, Akt-dependent metabolic reprogramming regulates tumor cell histone acetylation, **Cell Metabolism**, 2014

- ☐ >200 citations
- ☐ featured in multiple N&V highlights (Cancer Discovery, Molecular & Cellular Oncology, Molecules and Cells)

Carrer A, Wellen KE, Metabolism and epigenetics: a link cancer cells exploit, **Curr Opin Biotechnol.** 2014

Lee JV, Shah S, Carrer A, Wellen KE, *A Cancerous web: signaling, metabolism and the epigenome*, **Mol Cell Oncol**, 2015

Kazemi M, Carrer A, Moimas S, Zandonà L, Bussani R, Casagrande B, Palmisano S, Prelazzi P, Giacca M, Zentilin L, De Manzini N, Giacca M, Zacchigna S., *VEGF121 and VEGF165 differentially promote vessel maturation and tumor growth in mice and humans*, **Cancer Gene Ther.**, 2016

Zhao S, Torres T, Henry R, Trefely S, Wallace M, Lee JV, Carrer A, Sengupta A, Campbell SL, Kuo Y-M, Frey AJ, Meurs N, Viola JM, Blair IA, Weljie AM, Metallo CM, Snyder NW, Andrews AJ, Wellen KE, *ATP-citrate lyase controls a glucose-to-acetate metabolic switch*, **Cell Reports**, 2016

- ☐ >100 citations
- ☐ Cover article

Carrer A, Parris JLD, Trefely S, Henry RA, Montgomery D, Kuo Y-M, Blair IA, Meier JL, Andrews AJ, Snyder NW, and Wellen KE, *Impact of high fat diet on tissue acyl-CoA and histone acetylation levels*, **Journal of Biological Chemistry**, 2017

- ☐ "Highly downloaded" JBC paper for February 2017

McDonald O, Saunders T, Tryggvadottir R, Mentch S, Warmoes M, Word A, Carrer A, Salz T, Natsume S, Stauffer K, Makohon-Moore A, Zhong Y, Wu H, Wellen KE, Locasale JD, Iacobuzio-Donahue C, Li X,

*Large-scale epigenomic reprogramming links anabolic glucose metabolism to distant metastasis during the evolution of pancreatic cancer progression*, **Nature Genetics**, 2017

- >200 citations
- Multiple N&V commentaries
- WoS Highly Cited Paper 2019, 2020

Sivanand S, Rhoades S, Jiang Q, Lee JV, Benci J, Zhang J, Yuan S, Zhao S, Carrer A, Bennett MJ, Minn AJ, Weljie AM, Greenberg RA, Wellen KE, *Nuclear Acetyl-CoA Production by ACLY Promotes Homologous Recombination*, **Molecular Cell**, 2017

JV Lee, K Kim, CT Berry, P Sen, T Kim, A Carrer, S Trefely, S Zhao, LE Barney, AD Schwartz, S Fernandez, SR Peyton, NW Snyder, SL Berger, BD Freedman, KE Wellen, *Acetyl-CoA promotes glioblastoma cell adhesion and migration through Ca<sup>2+</sup>-NFAT signaling*, **Genes and Development**, 2018

- Highlighted article (Martinez & Chandel, G&D, 2018)

**Carrer A**, Parris JLD, Trefely S, Campbell SC, Norgard RJ, Egolf SS, Sidoli S, Trizzino M, Sivanand S, Sela Y, Blair IA, Garcia BA, Nathaniel W. Snyder, Stanger BZ and Kathryn E. Wellen, *acetyl-CoA metabolism supports multi-step pancreatic carcinogenesis*, **Cancer Discovery**, 2019

- N&V spotlight article (Halbrook & Lyssiotis, CD, 2019)
- Cover article
- F1000 Selection
- WoS Highly Cited Paper 2020

Sidoli S, Trefely S, Carrer A\*, *Integrated Analysis of Acetyl-CoA and Histone Modification via Mass Spectrometry to Investigate Metabolically Driven Acetylation*, **Methods Mol Biol**, 2019

Zhao S, Jang C, Liu J, Uehara K, Gilbert M, Izzo L, Zeng X, Trefely S, Fernandez S, Carrer A, Miller KD, Schug ZT, Snyder NW, Gade TP, Titchenell PM, Rabinowitz JD, Wellen KE, *Dietary Fructose feeds hepatic lipogenesis via microbiota-derived acetate*, **Nature**, 2020

Paoli C & Carrer A\*, *Organotypic culture of acinar cells for the study of pancreatic carcinogenesis*, **Cancers**, 2020

Grisan F, Spacci M, Paoli C, Costamagna A, Fantuz M, Martini M, Lefkimiatis K, Carrer A\*, *Cholesterol activates Cyclic AMP signaling in metaplastic acinar cells*, **Metabolites**, 2021

Calciolari B, Scapinello G, Quotti Tubi L, Piazza F, Carrer A\*, *Metabolic control of epigenetic rearrangements in B cell pathophysiology*, **Open Biology**, 2022

Cave DD, Buonaiuto S, Sainz B Jr, Fantuz M, Mangini M, Carrer A, Di Domenico A, Iavazzo TT, Andolfi G, Cortina C, Sevilano M, Heeschen C, Colonna V, Corona M, Cucciardi A, Di Guida M, Batlle E, De Luca A, Lonardo E, *LAMC2 marks a tumor-initiating cell population with an aggressive signature in pancreatic cancer*, **J Exp Clin Cancer Res**, 2022

Izzo LT, Trefely S, Demetriadou C, Drummond JM, Mizukami T, Kuprasertkul N, Farria AT, Nguyen PTT, Murali N, Reich L, Kantner DS, Shaffer J, Affronti H, Carrer A, Andrews A, Capell BC, Snyder NW, Wellen KE, *Acetylcarnitine shuttling links mitochondrial metabolism to histone acetylation and lipogenesis*, **Sci Adv**, 2023

R. Noè, N. Inglese, P. Romani, T. Serafini, M. Fantuz, A. Zamborlin, B. Calciolari, N.C. Surdo, C. Paoli, M. Spacci, M.L. Ermini, G. Di Benedetto, C. Santi, K. Lefkimiatis, S. Dupont, V. Voliani, L. Sancineto, A. Carrer\*, *Organic Selenium induces ferroptosis in pancreatic cancer cells*, **Redox Biol**, 2023

A. Cappelletto, E. Alfì, N. Volf, G. Ciucci, S. Vodret, M. Perin, A. Colliva, G. Rozzi, M. Rossi, F. Bortolotti, G. Ruozzi, L. Zentilin, M. Giacca, S. Piazza, M. Fantuz, A. Carrer, R. Vuerich, D. Borin, R. Lapasin, G. Del Sal, M. Chiesa, D. Lorzio, S. Kumar, H. Jo, A. Rustighi, S. Piccolo, S. Zacchigna, *EMID2 is a novel biotherapeutic for aggressive cancers identified by in vivo screening*, **J Exp Clin Cancer Res**, under revision