CURRICULUM VITAE

PERSONAL INFORMATION

Family name, First name: VASCOTTO, Carlo

Date of birth: 13/08/1976

Nationality: Italian

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EDUCATION

From: 01/11/2003 To: 22/05/2007	PhD in Biomedical and Biotechnological Sciences, Dept. of Medical and Biological Sciences (DSMB), University of Udine, Italy. Thesis: "*Molecular mechanisms of adaptive cellular response to oxidative stress*".
From: 10/09/1998 To: 21/12/2002	Master's degree in Biological Sciences, Department of Biochemistry, Biophysics, and Macromolecular Chemistry (BBCM), University of Trieste, Italy. Thesis: "*Role of transcriptional factor Egr-1 on bone regeneration*". Evaluation: 106/110.

CURRENT POSITIONS

From: 01/05-2023 To: present	Group Leader, International Institute of Molecular Mechanisms and Machines (IMol), Warsaw, Poland.
From: 01/06/2011 To: present (part-time)	Assistant Professor of Molecular Biology, Dept. of Medicine, University of Udine, Italy.

PREVIOUS POSITIONS

From: 24/09/2008 To: 31/05/2011	Research Assistant, Dept. of Medical and Biological Sciences, University of Udine, Italy.
From: 01/06/2007 To: 23/09/2008	Post-doctoral Fellow, Dept. of Medical and Biological Sciences, University of Udine, Italy.

RESEARCH EXPERIENCE

From: 01/09/2017 To: 31/08/2019	Visiting Professor - MSCA Fellow at the Centre of New Technologies of the University of Warsaw, Warsaw, Poland. Host: Prof. Chacinska. Research project: "*Mitochondrial translocation of the DNA repair protein APE1".*
From: 01/11/2015 To: 15/02/2016	Visiting Professor - EMBO Short-term Fellow, International Institute of Molecular and Cell Biology (IIMCB), Warsaw, Poland. Host: Prof. Chacinska. Research project: "*Mapping the transport pathway of APE1 into the mitochondrial matrix*".

From: 15/01/2010 To: 15/07/2010	Visiting Scientist - Fulbright Research Scholar Fellow, Indiana University, Dept. of Paediatrics, Indianapolis, IN, USA. Host: Prof. Kelley. Research project: "*Regulation of AP endonuclease (APE1) in cancer cells*".
From: 01/06/2006 To: 23/09/2008	Post-doctoral Fellow, University of Udine, Dept. of Medical and Biological Sciences, Italy. Supervisor: Prof. Tell. Research project: "*Proteomic approaches for the identification of APE1 interacting partners and their biological function*".
From: 15/06/2006 To: 15/12/2006	Visiting Student - Friuli Venezia Giulia Region "*Progetto D4*" Fellow, University of Texas Medical Branch, Sealy Centre for Molecular Medicine, Galveston, TX, USA. Host: Prof. Mitra. Research project: "*Identification of APE1 protein target genes*".
From: 1/06/2004 To: 31/11/2004	Visiting Student at the MRC of Edinburg, Human Genetic Unit. Host: Prof. Van Heyningen. Research project: "*RNA interference for gene silencing*".

RESEARCH GRANTS

Approved

2022-2026	HE-MSCA-DN – Vascotto (Coordinator and PI), MITGEST - "*Quality control of the mitochondrial gene expression system in health and disease*". (Total: ~2.7 MEuro; Vascotto Unit: ~700 KEuro)
2022-2025	NCN-OPUS 22 – Vascotto (PI), "*Inhibiting the Mitochondrial Intermembrane Space Assembly pathway as a new approach to prevent metabolic reprogramming of therapy-resistant leukemia*". (~620 KEuro);
2021-2024	H2020-MSCA-ITN – Vascotto (Unit Leader and PI), OLIGOMED - "*Oligonucleotides for Medical Applications*". (Total: ~4.3 MEuro; Vascotto Unit: 530 KEuro)

Completed as PI

2017-2019	NCN-Polonez 3 – Vascotto (PI), "*Mitochondrial translocation of the DNA repair protein APE1*". (~210 KEuro)
2016-2019	AIRC – Vascotto (PI), "*Targeting the mitochondrial form of APE1 protein to increase chemosensitivity in hepatocellular carcinoma*". (202 KEuro)

Completed as Co-I

2019-2022	NCN-Opus 16 – Wocławek-Potocka (PI), Vascotto (Co-I), "*Mitochondrial and metabolic adjustments during bovine in vitro embryo development - examination of the molecular quality markers of the bovine oocytes*". (~250 KEuro; Vascotto Unit: ~50 KEuro)
2016-2021	NIH-R01 – Storici (PI), Vascotto (Co-I), "*Ribose-seq profile and analysis of ribonucleotides in DNA of oxidatively-stressed and cancer cells*". (Total: 1.5 M$); Vascotto Unit: ~40 K$)

PATENTS

In January 2023 the patent # 102023000001137 has been submitted. It refers to a new method for assessing the extent of mitochondrial DNA (mtDNA) oxidative damage. Currently, in collaboration with Baseclick GmbH (Munich, Germany) we are starting the Validation Plan with the final goal to develop a commercially available kit for the quantification of mtDNA oxidative lesions.

RESEARCH ACTIVITIES

Currently, my laboratory is involved in two European projects: *Quality control of the mitochondrial gene expression system in health and disease* – MITGEST, of which I am the Coordinator, and *Oligonucleotides for Medical Applications* – OLIGOMED. We are studying the molecular mechanisms responsible for the degradation processes of damaged mitochondrial mRNAs and the characterization of the mitochondrial-nucleus crosstalk in the regulation of mitochondrial function. In OLIGOMED two projects are underway: the first one is aimed at the characterization of the biological activities of therapeutics oligonucleotides. In the second one, we are applying advanced confocal microscopy analyses (STED) to evaluate the delivery of oligonucleotides, their localization, half-life and testing innovative delivery systems.

The project "*Inhibiting the Mitochondrial Intermembrane Space Assembly (MIA) pathway as a new approach to prevent metabolic reprogramming of therapy-resistant leukemia stem-cells*" was recently financed by the Polish National Science Center (NCN). The project focuses on to study the role of the mitochondrial import pathway MIA and its correlation with stability of the mitochondrial genome in acute myeloid leukemia.

INSTITUTIONAL ROLES

From: May 2023 To: present	Delegate for the International relation of the BS in Biotechnologies at the University of Udine.
From: October 2021 To: present	Member of the Commission for Quality Education for the BS in Biotechnologies at the University of Udine.
From: April 2021 To: Present	Faculty member in the PhD program in Biomedical and Biotechnological Sciences at the Department of Medicine of University of Udine.
From: October 2021 To: present	Faculty member in the undergraduate program in Biotechnologies at the Department of Medicine of University of Udine.
From: January 2013 To: July 2022	Promoter and coordinator of an initiative to create an international scholarship in collaboration with the US-Italy Fulbright Commission to host a professor from the United States for a semester at the Department of Medicine of the University of Udine. The project was supported with 72KEuro through participation in competitive calls for internationalisation of BS and MS programs. So far, four Visiting Professors have been hosted.
From: March 2014 To: September 2021	Faculty member in the *Joint PhD Program in Molecular BiOlogy* (JuMBO) with the partecipation of Scuola Superiore di Studi Avanzati (SISSA), International Centre for Genetic Engineering and Biotechnology (ICGEB), University of Trieste and University of Udine.

From: October 2014 To: January 2016	Member of the Didactic Council of the MS in Medical Biotechnologies at the Department of Medicine of University of Udine.
From: February 2013 To: August 2017	In charge of the teaching laboratory of the BS and MS programs in Biotechnologies at the University of Udine.
From: June 2011 To: October 2015	In charge of the radioisotopes laboratory of the Department of Medical and Biological Sciences at the University of Udine.

ORAL PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONFERENCES

8-9 June 2022	Innovatorium 2022, Poznan, Poland. Title: "*Biomedical research in HE: from benchtop to bedside*".
18-20 April 2022	Cell and Experimental Biology Conferences, Boston (MA), USA. Title: "*New Role of Apurinic/apyrimidinic Endonuclease 1 Protein in the Degradation of Dysfunctional Abasic mRNA in Mitochondria*".
08-13 July 2018	Gordon Research Conference on Mitochondria and Chloroplasts, Lucca (Barga), Italy. Title: "*DNA repair protein APE1 degrades damaged abasic mRNA in human mitochondria*".
21 June 2013	American University of Rome – "Fulbright Meeting & Orientation", Roma, Italy. Title: "*Beyond the project*".
18 June 2013	Workshop Human Proteomic Project (HPP) – "Mitochondria: energy for life", Padova, Italy. Title: "*Role of APE1/Mia40 interaction in the maintenance of mitochondrial DNA integrity*".
26 October 2012	ERASMUS WEEK – "Regulation of gene expression", Trieste, Italy. Title: "*Regulation of mitochondrial protein functions*".
29 February-1 March 2012	EASL Basic School of Hepatology – "Hepatocyte Damage & Liver Metabolism", Trieste, Italy. Title: "*Redox-drived regulation of mitochondrial proteins function: insight and blind spots*".
15-19 May 2010	11th International Workshop on Radiation Damage to DNA, Atlanta, GA, USA. Title: "*Critical lysine residues within the N-terminal domain of APE1 regulates its biological functions*".
22-25 June 2009	4th Annual National Conference of the Italian Proteomic Association (ItPA), Milano, Italia. Title: "*An integrated approach of Proteomics and Genome-wide analysis studies reveals critical residues for APE1/Ref-1 functions*".

TEACHING AND MENTORING ACTIVITIES

Since the a.y. 2011/2012, I teach Molecular Biology to undergraduate students in Biotechnologies (65h/year), Advanced Proteomic Approaches to graduate students in Biotechnologies (50h/years), and thematic courses to students enrolled in the Joint PhD Program in Molecular Biology (JuMBO) (~10h/year). In total ~1000h of teaching.

I supervised the research activities and thesis preparation and discussion of 6 PhD students in Molecular Biology, 7 master students and 15 undergraduate students in Biotechnologies, and hosted in my laboratory 8 international summer students.

SCIENTIFIC PRODUCTION

Since 2004, I have published 42 research articles in international peer-reviewed journals: 7 as first author and 9 as corresponding author. The total impact factor is ~215, *h*-index 28, and 1945 citations (Scopus). Moreover, I contributed in the preparation of four book chapters. Currently, two articles are under evaluation on "*Frontiers in Molecular Neuroscience*" and "*Genome Biology*".

Manuscripts

1. Perrone L, Sbai O, Bazzani V, Tapaswi S, McHale J, **Vascotto C**, Perrone L. *Is Drp1 a link between mitochondrial dysfunction and inflammation in Alzheimer`s Disease?* Front Mol Neurosci. 2023 May 12;16:1166879. doi: 10.3389/fnmol.2023.1166879.
2. Bazzani V, Equisoain Redin M, McHale J, Perrone L, **Vascotto C**. *Mitochondrial DNA Repair in Neurodegenerative Diseases and Ageing*. Int J Mol Sci. 2022 Sep 27;23(19):11391. doi: 10.3390/ijms231911391.
3. Sbai1 O, Djelloul M, Auletta A, Ieraci A, **Vascotto C***, Perrone L. *RAGE-TXNIP axis drives inflammation in Alzheimer's by targeting Aβ to mitochondria in microglia*. Cell Death Dis. 2022 Apr 19;13(4):368. doi: 10.1038/s41419-022-04840-7. [* co-corresponding author]
4. Bazzani V, Pravisani R, Baccarani U, **Vascotto C**. *Hepatocellular Carcinoma: Diagnosis, Therapy and Molecular Investigations.* pp.60-65. J Cancer Immunology. 2021 vol. 3 (1). doi:10.33696/cancerimmunol.3.042.
5. Barchiesi A, Bazzani V, Jabczynska A, Borowski LS, Oeljeklaus S, Warscheid B, Chacinska A, Szczesny RJ, **Vascotto C**. *DNA Repair Protein APE1 Degrades Dysfunctional Abasic mRNA in Mitochondria Affecting Oxidative Phosphorylation*. J Mol Biol. 2021 Sep 3;433(18):167125. doi: 10.1016/j.jmb.2021.167125.
6. Barchiesi A, Bazzani V, Elancheliyan P, Wasilewski M, Chacinska A, **Vascotto C**. *Mitochondrial oxidative stress induces IMS/matrix translocation of APE1 through TIM23/PAM complex*. J Mol Biol. 2020 Dec 4;432(24):166713. doi: 10.1016/j.jmb.2020.11.012.
7. Bazzani V, Barchiesi A, Radecka D, Pravisani R, Guadagno A, Di Loreto C, Baccarani U, **Vascotto C**. *Mitochondrial Apurinic/Apyrimidinic Endonuclease 1 enhances mtDNA repair contributing to cell proliferation and mitochondrial integrity in early stages of hepatocellular carcinoma*. BMC-Cancer. 2020 Oct 7;20(1):969. doi: 10.1186/s12885-020-07258-6.
8. Barchiesi A and **Vascotto C**. *Transcription, Processing, and Decay of Mitochondrial RNA in Health and Disease.* Int J Mol Sci. 2019 May 6;20(9). pii: E2221. doi: 10.3390/ijms20092221. Review.
9. Barchiesi A, Baccarani U, Billack B, Tell G, **Vascotto C**. [Letter to the Editor] *Isolation of mitochondria is necessary for precise quantification of mitochondrial DNA damage in human carcinoma samples.* Biotechniques. 2017 Jan 1;62(1):13-17. doi: 10.2144/000114491.
10. Baldan F, Mio C, Allegri L, Conzatti K, Toffoletto B, Puppin C, Radovic S, **Vascotto C**, Russo D, Di Loreto C, Damante G. *Identification of tumorigenesis-related mRNAs associated with RNA-binding protein HuR in thyroid cancer cells*. Oncotarget. 2016 Sep 27;7(39):63388-63407. doi: 10.18632/oncotarget.11255.
11. Di Maso V, Mediavilla MG, **Vascotto C**, Lupo F, Baccarani U, Avellini C, Tell G, Tiribelli C, Crocè LS. Transcriptional Up-Regulation of APE1/Ref-1 in Hepatic Tumor: Role in Hepatocytes Resistance to Oxidative Stress and Apoptosis. PLoS One. 2015 Dec 1;10(12):e0143289. doi: 10.1371/journal.pone.0143289.

12. Barchiesi A, Wasilewski M, Chacinska A, Tell G, **Vascotto C**. *Mitochondrial translocation of APE1 relies on the MIA pathway.* Nucleic Acids Res. 2015 Jun 23;43(11):5451-64. doi: 10.1093/nar/gkv433.

13. Bortolussi G, Codarin E, Antoniali G, **Vascotto C**, Vodret S, Arena S, Cesaratto L, Scaloni A, Tell G, Muro AF. *Impairment of enzymatic antioxidant defenses is associated with bilirubin-induced neuronal cell death in the cerebellum of Ugt1 KO mice*. Cell Death Dis. 2015 May 7;6:e1739. doi: 10.1038/cddis.2015.113.

14. Poletto M, Malfatti MC, Dorjsuren D, Scognamiglio PL, Marasco D, **Vascotto C**, Jadhav A, Maloney DJ, Wilson DM 3rd, Simeonov A, Tell G. *Inhibitors of the apurinic/apyrimidinic endonuclease 1 (APE1)/nucleophosmin (NPM1) interaction that display anti-tumor properties*. Mol Carcinog. 2016 May;55(5):688-704. doi: 10.1002/mc.22313.

15. Avolio E, Gianfranceschi G, Cesselli D, Caragnano A, Athanasakis E, Katare R, Meloni M, Palma A, Barchiesi A, **Vascotto C**, Toffoletto B, Mazzega E, Finato N, Aresu G, Livi U, Emanueli C, Scoles G, Beltrami CA, Madeddu P, Beltrami AP. *Ex vivo molecular rejuvenation improves the therapeutic activity of senescent human cardiac stem cells in a mouse model of myocardial infarction.* Stem Cells. 2014 Sep;32(9):2373-85. doi: 10.1002/stem.1728

16. Domenis R, Bergamin N, Gianfranceschi G, **Vascotto C**, Romanello M, Rigo S, Vagnarelli G, Faggiani M, Parodi P, Kelley MR, Beltrami CA, Cesselli D, Tell G, Beltrami AP. *The redox function of APE1 is involved in the differentiationprocess of stem cells toward a neuronal cell fate*. PLoS One. 2014 Feb19;9(2):e89232. doi: 10.1371/journal.pone.0089232.

17. Londero AP, Orsaria M, Tell G, Marzinotto S, Capodicasa V, Poletto M, **Vascotto C**, Sacco C, Mariuzzi L. *Expression and prognostic significance of APE1/Ref-1 and NPM1 proteins in high-grade ovarian serous cancer*. Am J Clin Pathol. 2014Mar;141(3):404-14. doi: 10.1309/AJCPIDKDLSGE26CX.

18. Antoniali G, Lirussi L, D'Ambrosio C, Dal Piaz F, **Vascotto C**, Casarano E, Marasco D, Scaloni A, Fogolari F, Tell G. *SIRT1 gene expression upon genotoxic damage is regulated by APE1 through nCaRE-promoter elements*. Mol Biol Cell. 2014 Feb;25(4):532-47. doi: 10.1091/mbc.E13-05-0286.

19. Romanello M, Piatkowska E, Antoniali G, Cesaratto L, **Vascotto C**, Iozzo RV, Delneri D, Brancia FL. *Osteoblastic cell secretome: a novel role for progranulin during risedronate treatment*. Bone. 2014 Jan;58:81-91. doi:10.1016/j.bone.2013.10.003.

20. Tell G, Di Piazza M, Kamocka MM, **Vascotto C**. *Combining RNAi and in vivo confocal microscopy analysis of the photoconvertible fluorescent protein Dendra2 to study a DNA repair protein*. Biotechniques. 2013 Oct;55(4):198-203. doi:10.2144/000114088.

21. Cesaratto L, Codarin E, **Vascotto C**, Leonardi A, Kelley MR, Tiribelli C, TellG. *Specific inhibition of the redox activity of ape1/ref-1 by e3330 blocks TNF-α-induced activation of IL-8 production in liver cancer cell lines*. PLoS One. 2013 Aug 15;8(8):e70909. doi: 10.1371/journal.pone.0070909.

22. **Vascotto C**, Lirussi L, Poletto M, Tiribelli M, Damiani D, Fabbro D, Damante G, Demple B, Colombo E, Tell G. *Functional regulation of the apurinic/apyrimidinic endonuclease 1 by nucleophosmin: impact on tumor biology*. Oncogene. 2013 Jul 8.doi: 10.1038/onc.2013.251.

23. Poletto M, **Vascotto C**, Scognamiglio PL, Lirussi L, Marasco D, Tell G. *Role of the unstructured N-terminal domain of the hAPE1 (human apurinic/apyrimidinic endonuclease 1) in the modulation of its interaction with nucleic acids and NPM1 (nucleophosmin)*. Biochem J. 2013 Jun 15;452(3):545-57. doi: 10.1042/BJ20121277.

24. Marasco D, Ruggiero A, **Vascotto C**, Poletto M, Scognamiglio PL, Tell G,Vitagliano L. *Role of mutual interactions in the chemical and thermal stability of nucleophosmin NPM1 domains*. Biochem Biophys Res Commun. 2013 Jan11;430(2):523-8. doi: 10.1016/j.bbrc.2012.12.002.

25. Tell G, **Vascotto C**, Tiribelli C. *Alterations in the redox state and liver damage: hints from the EASL Basic School of Hepatology*. J Hepatol. 2013Feb;58(2):365-74. doi: 10.1016/j.jhep.2012.09.018.

26. Lirussi L, Antoniali G, **Vascotto C**, D'Ambrosio C, Poletto M, Romanello M, Marasco D, Leone M, Quadrifoglio F, Bhakat KK, Scaloni A, Tell G. *Nucleolar accumulation of APE1 depends on charged lysine residues that undergo acetylation upon genotoxic stress and modulate its BER activity in cells.* Mol Biol Cell. 2012Oct;23(20):4079-96. doi: 10.1091/mbc.E12-04-0299.

27. Li M, **Vascotto C**, Xu S, Dai N, Qing Y, Zhong Z, Tell G, Wang D. *Human AP endonuclease/redox factor APE1/ref-1 modulates mitochondrial function after oxidative stress by regulating the transcriptional activity of NRF1*. Free Radic Biol Med. 2012 Jul 15;53(2):237-48. doi: 10.1016/j.freeradbiomed.2012.04.002.

28. **Vascotto C**, Bisetto E, Li M, Zeef LA, D'Ambrosio C, Domenis R, Comelli M, Delneri D, Scaloni A, Altieri F, Mavelli I, Quadrifoglio F, Kelley MR, Tell G. *Knock-in reconstitution studies reveal an unexpected role of Cys-65 in regulatingAPE1/Ref-1 subcellular trafficking and function*. Mol Biol Cell. 2011Oct;22(20):3887-901. doi: 10.1091/mbc.E11-05-0391.

29. Fantini D, **Vascotto C**, Marasco D, D'Ambrosio C, Romanello M, Vitagliano L, Pedone C, Poletto M, Cesaratto L, Quadrifoglio F, Scaloni A, Radicella JP, Tell G. *Critical lysine residues within the overlooked N-terminal domain of human APE1 regulate its biological functions.* Nucleic Acids Res. 2010 Dec;38(22):8239-56. doi: 10.1093/nar/gkq691.

30. **Vascotto C**, Fantini D, Romanello M, Cesaratto L, Deganuto M, Leonardi A, Radicella JP, Kelley MR, D'Ambrosio C, Scaloni A, Quadrifoglio F, Tell G. *APE1/Ref-1 interacts with NPM1 within nucleoli and plays a role in the rRNA quality control process*. Mol Cell Biol. 2009 Apr;29(7):1834-54. doi: 10.1128/MCB.01337-08.

31. **Vascotto C**, Cesaratto L, Zeef LA, Deganuto M, D'Ambrosio C, Scaloni A, Romanello M, Damante G, Taglialatela G, Delneri D, Kelley MR, Mitra S, Quadrifoglio F, Tell G. *Genome-wide analysis and proteomic studies reveal APE1/Ref-1 multifunctional role in mammalian cells*. Proteomics. 2009 Feb;9(4):1058-74. doi: 10.1002/pmic.200800638.

32. Codutti L, van Ingen H, **Vascotto C**, Fogolari F, Corazza A, Tell G, Quadrifoglio F, Viglino P, Boelens R, Esposito G. *The solution structure of DNA-free Pax-8 paired box domain accounts for redox regulation of transcriptional activity in the pax protein family*. J Biol Chem. 2008 Nov 28;283(48):33321-8. doi: 10.1074/jbc.M805717200.

33. Iannetti A, Pacifico F, Acquaviva R, Lavorgna A, Crescenzi E, **Vascotto C**, Tell G, Salzano AM, Scaloni A, Vuttariello E, Chiappetta G, Formisano S, Leonardi A. *The neutrophil gelatinase-associated lipocalin (NGAL), a NF-kappaB-regulated gene, is a survival factor for thyroid neoplastic cells*. Proc Natl Acad Sci U S A. 2008 Sep 16;105(37):14058-63. doi: 10.1073/pnas.0710846105.

34. Fantini D, **Vascotto C***, Deganuto M, Bivi N, Gustincich S, Marcon G, Quadrifoglio F, Damante G, Bhakat KK, Mitra S, Tell G. *APE1/Ref-1 regulates PTEN expression mediated by Egr-1*. Free Radic Res. 2008 Jan;42(1):20-9. doi: 10.1080/10715760701765616. [*: co-first author author]

35. Avellini C, Baccarani U, Trevisan G, Cesaratto L, **Vascotto C**, D'Aurizio F, Pandolfi M, Adani GL, Tell G. *Redox proteomics and immunohistology to study molecular events during ischemia-reperfusion in human liver*. Transplant Proc. 2007 Jul-Aug;39(6):1755-60.

36. Cesaratto L, Calligaris SD, **Vascotto C**, Deganuto M, Bellarosa C, Quadrifoglio F, Ostrow JD, Tiribelli C, Tell G. *Bilirubin-induced cell toxicity involves PTEN activation through an APE1/Ref-1-dependent pathway*. J Mol Med (Berl). 2007 Oct;85(10):1099-112.

37. Pacifico F, Paolillo M, Chiappetta G, Crescenzi E, Arena S, Scaloni A, Monaco M, **Vascotto C**, Tell G, Formisano S, Leonardi A. *RbAp48 is a target of nuclear factor-kappaB activity in thyroid cancer*. J Clin Endocrinol Metab. 2007 Apr;92(4):1458-66.

38. **Vascotto C**, Salzano AM, D'Ambrosio C, Fruscalzo A, Marchesoni D, di Loreto C, Scaloni A, Tell G, Quadrifoglio F. *Oxidized transthyretin in amniotic fluid as an early marker of preeclampsia*. J Proteome Res. 2007 Jan;6(1):160-70.

39. Pines A, Bivi N, **Vascotto C**, Romanello M, D'Ambrosio C, Scaloni A, Damante G, Morisi R, Filetti S, Ferretti E, Quadrifoglio F, Tell G. *Nucleotide receptors stimulation by extracellular ATP controls Hsp90 expression through APE1/Ref-1 in thyroid cancer cells: a novel tumorigenic pathway*. J Cell Physiol. 2006 Oct;209(1):44-55.

40. **Vascotto C**, Cesaratto L, D'Ambrosio C, Scaloni A, Avellini C, Paron I, Baccarani U, Adani GL, Tiribelli C, Quadrifoglio F, Tell G. *Proteomic analysis of liver tissues subjected to early ischemia/reperfusion injury during human orthotopic liver transplantation*. Proteomics. 2006 Jun;6(11):3455-65.

41. Salzano AM, Paron I, Pines A, Bachi A, Talamo F, Bivi N, **Vascotto C**, Damante G, Quadrifoglio F, Scaloni A, Tell G. *Differential proteomic analysis of nuclear extracts from thyroid cell lines*. J Chromatogr B Analyt Technol Biomed Life Sci. 2006 Mar 20;833(1):41-50.

42. Risso A, Tell G, **Vascotto C**, Costessi A, Arena S, Scaloni A, Cosulich ME. *Activation of human T lymphocytes under conditions similar to those that occur during exposure to microgravity: a proteomics study*. Proteomics. 2005 May;5(7):1827-37.

43. Cesaratto L, **Vascotto C**, D'Ambrosio C, Scaloni A, Baccarani U, Paron I, Damante G, Calligaris S, Quadrifoglio F, Tiribelli C, Tell G. *Overoxidation of peroxiredoxins as an immediate and sensitive marker of oxidative stress in HepG2 cells and its application to the redox effects induced by ischemia/reperfusion in human liver*. Free Radic Res. 2005 Mar;39(3):255-68.

44. Cesaratto L, **Vascotto C**, Calligaris S, Tell G. The importance of redox state in liver damage. Ann Hepatol. 2004 Jul-Sep;3(3):86-92. Review.

Book chapters

1. **Vascotto C**, Poletto M, Tell G. *Understanding the basic for translating the base excision repair pathway from benchtop to bedside in cancer treatment*. In: DNA Repair in Cancer Therapy: Molecular Targets and Clinical Applications. Second Edition, 2016. p. 83-114, ISBN: 978-0-12-803582-5.

2. **Vascotto C***, Tiribelli C. *Oxidative stress, antioxidant defenses and the liver*. In: Studies on Hepatic Disorders. 2015. p. 41-64, ISBN: 9783319155388. [*: corresponding author]

3. Fishel M, **Vascotto C**, Kelley MR. *Novel Base Excision Repair Therapeutics: APE1 focus and a brief summary of other BER targets*. In: DNA Repair and Cancer: From Bench to Clinic. 2013. p. 233–287, ISBN: 1466577436.

4. **Vascotto C**, Fishel ML. *Blockade of Base Excision Repair: Inhibition of Small Lesions Results in Big Consequences to Cancer Cells*. In: DNA Repair in Cancer Therapy: Molecular Targets and Clinical Applications. 2011, p. 29-53, ISBN: 9780123849991.