Curriculum Vitae of Prof. Massimo Donadelli

FULL PROFESSOR OF BIOCHEMISTRY (BIO/10)

Personal data:

Massimo Donadelli
University of Verona, Verona (Italy)
Department of Neurosciences, Biomedicine and Movement Sciences; Section of Biochemistry
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Citizenship: Italian; Place of birth: Castiglione delle Stiviere (Mantova, Italy)
Date of birth: November 18th, 1974

Main steps in education:

2020: Full Professor of Biochemistry (BIO/10), University of Verona
2019: Coordinator of the PhD Course in Biomolecular Medicine, University of Verona.
2017: positive evaluation for Full professorship in Biochemistry (BIO/10), by the Italian National Examination Board
2014: Associate Professor of Biochemistry, University of Verona
2007/2014: Assistant Professor of Biochemistry, University of Verona
2005/to date: Teaching Professor of Biochemistry, University of Verona
2005/07: Post-Doc fellowship, University of Verona
2001/04: PhD in Biochemistry, University of Verona, Italy
1999: Degree in Biological Sciences (110/110 cum laude), University of Parma (Italy)

Main research experience/interest:

Massimo Donadelli, PhD and Full Professor of Biochemistry, is a motivated scientist who has established his capacity to lead a research group as demonstrated by several last/corresponding authorship in research papers published in international peer-reviewed scientific journals. The scientific interests of Prof. Donadelli have been mainly addressed to the identification of innovative strategies to inhibit the proliferation of pancreatic adenocarcinoma cells and of chronic lymphocytic leukemia primary cells, with special attention to the mechanisms of cell resistance to the standard chemotherapeutic drugs and to the alteration of the energy metabolism of cancer cells. Prof. Donadelli has a consolidated experience in the transcriptional regulation of genes by epigenetic modifications, in the regulation of oxidative stress by different mechanisms, in the regulation of autophagy machinery in cancer, and in the regulation of mitochondrial dynamics and functionality. Over the last years, his research studies have been mainly focused on the regulation of the molecular mechanisms driven by the mutated form of p53 and its involvement in cancer chemoresistance. He coordinates a number of scientific collaborations with prominent national and international scientists in the field of cancer research. During his career, he participated in numerous funded research projects, either as a researcher or as a principal investigator (PI). He is currently a member of several scientific societies and a member of the Editorial Board of various scientific journals associated to cancer research.

Funding information:

2001: Growth control of pancreatic carcinoma (PRIN; PI Dr. Sergio Pedrazzoli)
2002: Identification of diagnostic and clinic markers and of therapeutic targets in pancreas cancer by gene expression profiles (PRIN; PI Dr. Valerio Di Carlo)

2003: Growth control of pancreatic carcinoma (PRIN; PI Dr. Sergio Pedrazzoli)
2004: In vitro and in vivo studies of novel chemotherapeutic strategies in pancreatic adenocarcinoma: identification of the molecular mechanisms involved (Fondazione Cassa di Risparmio di Verona Vicenza Belluno e Ancona; PI Dr. Marta Palmieri)
2005: Development of experimental and clinic treatments against pancreatic carcinoma (PRIN; PI Dr. Sergio Pedrazzoli)
2008: Tumor microenvironment and tumor spread in gastrointestinal cancers (AIRC regional projects-Veneto 2008; PI Dr. Donato Nitti)
2008: Effects of oxidative stress induced by gemcitabine and anti-tumoral synergism with cannabinoids in pancreatic cancer cells (Joint Project; PI Dr. Massimo Donadelli)
2008-to date: Dr. Donadelli obtains research funds by Ministero Italiano dell'Istruzione, dell'Università e della Ricerca (MIUR)
2009: Nano-technological development of cytotoxic and target-based drugs in the treatment of cancers: new strategies based on biological rational (PRIN; PI Dr. Michele Caraglia)
2010: Verona Nano-Medicine Initiative (2010; PI Dr. Dr. Guido Francesco Fumagalli)
2013-2014: Innovative therapeutic approaches in pancreatic tumors (renewal of AIRC regional projects-Veneto 2008; PI Dr. Donato Nitti)
2015: Creating an international and multidisciplinary group for the study of oxidative stress in the development and progression of cancer (Govern of the Balearic Islands, Spain. PI Prof. Pilar Roca)
2015: From secretome knowledge to personalized therapy in pancreatic cancer patients with mutant p53 (Joint Project; PI Prof. Massimo Donadelli)
2017: Hacking pancreatic adenocarcinoma drug resistance with novel NO-GEM prodrugs targeting mitochondria and encapsulated in decorated liposomes (Joint Project; PI Prof. Massimo Donadelli)
2017: Individual funding for basic research activities (MIUR-ANVUR; PI Prof. Massimo Donadelli)
2018: An antioxidant signature as a newer prognostic model in chronic lymphocytic leukemia (Gilead Sciences; PI Prof. Maria Teresa Scupoli)

Awards, Conferences as invited speaker, and Participation to Editorial or Advisory Boards:

Awards:
2004: Prize for the scientific contribution "Synergistic effect of gemcitabine and trichostatin A in cell growth inhibition of pancreatic cancer cells in nude mice" 28th National Congress of Italian Association in the Study of Pancreas (AISP).
2015: Prize for the best poster entitled "Mutant p53 proteins counteract autophagic machinery sensitizing cancer cells to mTOR inhibition" 28th National Congress of Italian Association Cell Cultures (AICC).
2018: Prize for the best (pre)clinical contribution "Mutant p53 proteins influence secretome of pancreatic cancer cells" Journal of Experimental and Clinical Cancer Research (JECCR).

Selection of oral presentations of Dr. Donadelli as invited speaker:
- Molecular Mechanisms of Growth Inhibition of Human Pancreatic Adenocarcinoma Cells by Trichostatin A. 48° Congresso Nazionale SIB (Società Italiana di Biochimica e Biologia Molecolare), Ferrara 15 Settembre 2003.
- Trichostatin A enhances growth inhibition by gemcitabine of human pancreatic adenocarcinoma cell lines in vitro and in vivo. 48°Congresso Nazionale della "Società Italiana di Cancerologia" (SIC), Bari 1-4 Ottobre 2006.

- The intracellular increase of zinc ions by PDTC induces ROS/AIF-mediated apoptosis in pancreatic adenocarcinoma cells. 48°Congresso Nazionale della "Società Italiana di Cancerologia" (SIC), Bari 1-4 Ottobre 2006.
- Intracellular zinc increase selectively inhibits p53-/- pancreatic adenocarcinoma cell growth by ROS/AIF-mediated apoptosis. 20° Congresso della Associazione Italiana Colture Cellulari (AICC), Napoli "Fondazione G. Pascale" 6-7 Dicembre 2007.
- Intracellular zinc increase inhibits p53-/- pancreatic adenocarcinoma cell growth by ROS/AIF-mediated apoptosis. 53° Congresso Nazionale SIB (Società Italiana di Biochimica e Biologia Molecolare), Riccione 23-26 Settembre 2008.
- UCP2 inhibition triggers ROS-dependent nuclear translocation of GAPDH and autophagic cell death synergistically inhibiting pancreatic cancer cell proliferation with gemcitabine. 25° Convegno Annuale della Associazione Italiana di Colture Cellulari (ONLUS-AICC), Palermo 21-23 Novembre 2012.
-Hacking pancreatic cancer drug resistance with novel NO-gemcitabine prodrugs encapsulated in liposomes. Conference "Therapeutic nanoproducts: from biology to innovative technology" at Istituto Superiore di Sanità (ISS), Roma (19th-20th June 2019).
-Mutant p53-dependent alterations of cancer metabolism and of signaling pathways involved in autophagy and redox regulation. 60th annual meeting of the Italian Society of Biochemistry and Molecular Biology (SIB), Lecce, 2019.

Editorial Board and Reviewer:
-Prof. Donadelli is a member of the Editorial Board of the following international scientific journals: *World Journal of Gastroenterology; Journal of Experimental & Clinical Cancer Research; International Journal of Molecular Sciences*.
-He is also serving as a Reviewer of several international scientific journals: *Cancer Letters*, *BBA-Molecular Cell Research*, *Tumor Biology*, *Current Protein & Peptide Science*, *BMC Cancer*, *Journal of Cellular Biochemistry*, *PLoS One*, *International Journal of Biochemistry & Cell Biology*, *Oncotarget*, *Oncogene*, *Cellular and Molecular Life Sciences*, *Chemical Research in Toxicology*, *Frontiers in Pharmacology*, *Journal of Experimental & Clinical Cancer Research*, *Cell Death & Disease*.
-He is invited Guest Editor for the journals *Seminars in Cell & Developmental Biology* in 2017 and 2019; *Oxidative Medicine and Cellular Longevity* in 2019.
-He was Member of the examining board for doctoral thesis at the University of the Balearic Islands (Palma) in 2014 and in 2015.
-He was also Reviewer of the Research Projects "FIRB, Futuro in Ricerca 2013" and "SIR (Scientific Independence of young Researchers) 2014 and 2015" funded by Ministero Italiano dell'Istruzione, dell'Università e della Ricerca (MIUR).
-He was Reference Evaluator for position of Research Assistant at the Imperial College of London and at the University of Cambridge, UK (2015).
-He was Reviewer of European Research Council (ERC) Consolidator Grant 2016.
-He was Reviewer of several research projects form various national universities or public institutions.
-He was Coordinator and Reviewer of several research projects from French National Cancer Institute (INCa), 2019 and 2020.

Advisory Board and Congress Organization:
Prof. Donadelli is member and secretary of the Board of Directors of "Associazione Italiana di Colture Cellulari" (AICC) and he was organizer and scientific manager of the following Conferences:

- 27th Annual Conference of AICC "*Oxidative stress and cell death: implications in chronic-degenerative processes and cancer*", which has been hold at the University of Verona (12th-14th November, 2014).
- 28th Annual Conference of AICC "*Approaching the new era of molecular medicine: from target based agents to nucleic acids in the treatment of tumours and neurodegenerative diseases*" hold at the University of Naples (16th-17th November 2015).
- Conference "*Exosomes in Pathological Conditions*" hold in Roma 9th-10th June 2016.
- Conference "*Comunicare la Scienza*" hold at the University of Verona 24th June 2016.
- 29th Annual Conference of AICC "Crossroads in cellular and molecular biotechnology" hold at the University of L'Aquila (23th-25th November 2016).
- Conference "*The future of cancer therapy: the genome editing era*" hold at University of Magna Graecia (Catanzaro, Italy) 8-9th June 2017.
- 30th Annual Conference of AICC "*Tumor-immune cell interface in solid and hematological malignancies*" hold at Istituto Tumori, Milan (27th-28th November 2017).
- Workshop on organoid cultures: "*Organoid Models and Applications in Biomedical Research*" hold at the University of Verona, 8th March, 2018
- Conference "*High-throughput MS-based proteomics and metabolomics: from cells to clinic*" hold at the University of Eastern Piedmont, Novara (25th-26th June 2018)
- 31th Annual Conference of AICC "*Cell Communication and Signaling: how to turn bad language into positive one*" hold at Istituto Ortopedico Rizzoli (IOR), Bologna (27th-28th November 2018)
- Conference "*Therapeutic nanoproducts: from biology to innovative technology*" hold at Istituto Superiore di Sanità (ISS), Roma (19th-20th June 2019)
- Conference "*MS-based untargeted proteomics and metabolomics: cancer metabolism, therapeutic targets and biomarkers*" hold at the University of Verona (1st-2nd July 2019)
- 32th Annual Conference of AICC "*From single gene analysis to single cell profiling: a new era for precision medicine*" hold at University of Magna Graecia, Catanzaro, Italy (30thSept-1stOct 219).
- 33th Annual Conference of AICC "Dissecting metabolic circuitries in cancer cells and microenvironment: how to learn from bad lessons to develop new therapeutic opportunities" University of Turin, 2021.
- International Conference of AICC "Cell to cell delivery in cancer and therapy a matter of carriers and messages", University La Sapienza, Roma, 2021.

Summary of Scientific Achievements and Publications:

Currently, Prof. Donadelli is co-author of 95 manuscripts published in international scientific peer-reviewed journals (IF average is 7,50; Hirsch index is 43; total citations about 10.000). He is also author of several scientific contributes presented as abstract or poster in national or international Congresses.

I, the undersigned, declare that the contents of this document are true. The declarations made in this document are made in accordance with articles 46 and 47 of D.P.R. 445/2000.

Verona, 20th September 2024

In faith,
Prof. Massimo Donadelli