

Curriculum Vitae

Personal information Désirée Bonci

Work experience

- Employer: Italian national institute of Health/Istituto Superiore di Sanità (ISS)
 - Start date: 011998
 - End date: 032002
 - Position: Project Researcher
 - Activities: Hematology and Oncology
 - Country: Italy
- Employer: Kimmel Cancer Centre/Philadelphia
 - Start date: 082000
 - End date: 032001
 - Position: Project Researcher
 - Activities: Oncology and non_coding_RNA
 - Country: United States
- Employer: Italian Institute of cancer/Regina Elena (IFO/IRE)research centre/hospital
 - Start date: 062013
 - End date: 062018
 - Position: Projectmanagewr/Group leader
 - Activities: Oncology
 - Country: Italy
- Employer: Italian national institute of Health/Istituto Superiore di Sanità (ISS)
 - Start date: 032002
 - End date:
 - Position: Permanent III level Researcher
 - Activities: Haematology and Oncology
 - Country: Italy
 - Start date: 012021
 - Position: Permanent II level Researcher
 - Country: Italy
 - Activities: Haematology and Oncology
 - Start date: 012009
 - Position: Project manager; Group Leader
 - Position: Quality expert AIRA/ISS
 - Date: 012022

Education and training

- Subject: Perugia University
 - Start date: 101992
 - End date: 101997
 - Qualification: Degree in Biological Science
 - Organisation: Skills: Biotechnology; leukaemia and Oncology; the degree training was under the supervision of Prof. Pier Giuseppe Pelicci and Prof. Francesco Grignani at the Department of Clinical experimental medicine (Perugia)
 - Country: Italy
- Subject: La sapienza University, Rome
 - Start date: 112002
 - End date: 012007
 - Qualification: PhD in Experimental Medicine
 - Organisation: Skills: Oncology; The PhD training was under the supervision of the tutors Prof. Ruggero De Maria and Prof. M.R. Parisi.
 - Country: Italy

Additional information

Publications

Publications [H_Index: 24; Citation number: 5191; Impact factor (Total) > 230; ORCID ID(O_ID):0000_0002_2472_5140]. 1_Diagnostic and prognostic potential of the proteomic profiling of serum_derived extracellular vesicles in prostate cancer. Signore M, Alfonsi R, Federici G, Nanni S, Addario A, Bertuccini L, Aiello A, Di Pace A. L, Sperduti I, Muto G, Giacobbe A, Collura D, Brunetto L, Simone G, Costantini M, Crinò L, Rossi S, Tabolacci C, Diociaiuti M, Merlino T, Gallucci M, Sentinelli S, Papalia R, De Maria R, Bonci D. Cell Death Dis. 2021 Jun 21;12(7):636. doi: 10.1038/s41419_021_03909_z. Last and Corresponding author 2_Organoids as a new model for improving regenerative medicine and cancer personalized therapy in renal diseases. Grassi L, Alfonsi R, Francescangeli F, Signore M, De Angelis ML, Addario A, Costantini M, Flex E, Cioffi A, Pizzi S, Bruselles A, Pallocca M, Simone G, Haoui M, Falchi M, Milella M, Sentinelli S, Di Matteo P, Stellacci E, Gallucci M, Muto G, Tartaglia M, De Maria R, Bonci D. Cell Death Dis. 2019 Feb 27;10(3):201. doi: 10.1038/s41419_019_1453_0. Last and Corresponding author 3_Renal cancer: new models and approach for personalizing therapy. di Martino S, De Luca G, Grassi L, Federici G, Alfonsi R, Signore M, Addario A, De Salvo L, Francescangeli F, Sanchez M, Tirelli V, Muto G, Sperduti I, Sentinelli S, Costantini M, Pasquini L, Milella M, Haoui M, Simone G, Gallucci M, De Maria R, Bonci D. J Exp Clin Cancer Res. 2018 Sep 5;37(1):217. doi: 10.1186/s13046_018_0874_4. Last and Corresponding author 4_The Double Face of Exosome_Carried MicroRNAs in Cancer Immunomodulation. Alfonsi R, Grassi L, Signore M, Bonci D. Int J Mol Sci. 2018 Apr 13;19(4). pii: E1183. doi: 10.3390/ijms19041183. Review. Last and Corresponding author 5_C_Met/miR_130b axis as novel mechanism and biomarker for castration resistance state acquisition. Cannistraci A, Federici G, Addario A, Di Pace AL, Grassi L,

Muto G, Collura D, Signore M, De Salvo L, Sentinelli S, Simone G, Costantini M, Nanni S, Farsetti A, Coppola V, De Maria R, Bonci D. *Oncogene*. 2017 Jun 29;36(26):3718-3728. doi: 10.1038/ncr.2016.505. Epub 2017 Feb 13. Last and Corresponding author 6_A microRNA code for prostate cancer metastasis. Bonci D, Coppola V, Patrizii M, Addario A, Alessio Cannistraci A, Francescangeli F, Pecci R, Muto G, Collura D, Bedini R, Zeuner A, Valtieri M, Sentinelli S, Benassi MS, Gallucci M, Carlini P, Piccolo S, De Maria R. *Oncogene* 2016; First and Corresponding author 7_ A predictive signature for therapy assignment and risk assessment in prostate cancer. Bonci D, De Maria R. *Oncoscience* 2015 Nov 20;2(11):920-3. doi: 10.18632/oncoscience.271.PMID: 26697526. First and Corresponding author 8_ miR_15/miR_16 loss, miR_21 upregulation, or deregulation of their target genes predicts poor prognosis in prostate cancer patients. Bonci D, De Maria R. *Mol Cell Oncol*. 2015 Dec 10;3(4):e1109744. doi: 10.1080/23723556.2015.1109744. PMID: 27652312 First and Corresponding author 9_MicroRNA as new tools for prostate cancer risk assessment and therapeutic intervention: results from clinical data set and patients' samples. Cannistraci A, Di Pace AL, De Maria R, Bonci D. *Biomed Res Int*. 2014; Last and Corresponding author 10_ A tight junction between E_Cadherin and the prostate tumor suppressor SPDEF. Coppola V, Bonci D. *Asian J Androl*. 2013 Jul;15(4):449-50. doi: 10.1038/aja.2013.63. Epub 2013 May 27. Last and Corresponding author 11_Functional role of microRNAs in prostate cancer and therapeutic opportunities. Maugeri_Sacca M, Coppola V, De Maria R, Bonci D. *Crit Rev Oncog*. 2013;18(4):303-15. Review. Last and Corresponding author. 12_BTG2 loss and miR_21 upregulation contribute to prostate cell transformation by inducing luminal markers expression and epithelial_mesenchymal transition. Coppola V, Musumeci M, Patrizii M, Cannistraci A, Addario A, Maugeri_Sacca M, Biffoni M, Francescangeli F, Cordenonsi M, Stefano Piccolo, Memeo L, Pagliuca A, Muto G, Zeuner A, De Maria R and Bonci D. *Oncogene* 2013; Last and Corresponding author 13_MicroRNAs and prostate cancer: from preclinical research to translational oncology. Maugeri_Sacca M, Coppola V, Bonci D, De Maria R. *Cancer J*. 2012 May_Jun;18(3):253-61. doi: 10.1097/PPO.0b013e318258b5b6. Review; 14_Systemic in vivo lentiviral delivery of miR_15a/16 reduces malignancy in the NZB de novo mouse model of chronic lymphocytic leukemia. Kasar S, Salerno E, Yuan Y, Underbayev C, Vollenweider D, Laurindo MF, Fernandes H, Bonci D, Addario A, Mazzella F, Raveche E. *Genes Immun*. 2012 Feb;13(2):109-19. 15_Control of tumor and microenvironment crosstalk by miR_15a and miR_16 in prostate cancer. Musumeci M, Coppola V, Addario A, Patrizii M, Maugeri_Sacca M, Memeo L, Colarossi C, Francescangeli F, Collura D, Giacobbe A, Biffoni M, Falchi M, Venneri M.A, D'Urso L, Muto G, De Maria R and Bonci D. *Oncogene*.2011; Last and Corresponding author 16_Caporalì A., Meloni M., Völlenkne C., Bonci D, Sala_Newby G, Masson, R; Baker A.H, Addis R, Agami R; Spinetti, G; Condorelli G, Madeddu P; Martelli F, Emanuelli C. Deregulation of microRNA_503 contributes to diabetes_induced impairment of endothelial function and reparative angiogenesis after limb ischemia. *Circulation* 2010. 17_MicroRNA_21 as Therapeutic Target in Cancer and Cardiovascular Disease. Bonci D. *Recent Pat Cardiovasc Drug Discov*. 2010 18_Manipulating the cell differentiation through lentiviral vectors. Coppola V, Galli C, Musumeci M, Bonci D. *Methods Mol Biol*. 2010. Last and corresponding author 19_MicroRNAs and prostate cancer. Coppola V, De Maria R, Bonci D. *Endocr Relat Cancer*. 2010. Last and corresponding author 20_Akt regulates L_Type Calcium Channel activity by modulating Cav_alpha1 protein stability. Catalucci D., Zang D., De Santiago J., Amond F., Barbara G., Chemin J., Bonci D., Picht E, Rusconi F., Dal ton N., Alessi D., Peterson K., Richard S., Bers D., Condorelli G. *Journal of Cell Biology* 2009 21_The inhibition of the highly expressed miR_221 and miR_222 impairs the growth of prostate carcinoma xenografts in mice. Mercatelli N, Coppola V, Bonci D, Miele F, Costantini A, Guadagnoli M, Bonanno E, Muto G, Frajese GV, De Maria R, Spagnoli LG, Farace MG, Ciafrè SA. *PLoS ONE*. 2008 22_The miR_15a_miR_16_1 cluster controls prostate cancer by targeting multiple oncogenic activities. Bonci D, Coppola V, Musumeci M, Addario A, Giuffrida R, Memeo L, D'Urso L, Pagliuca A, Biffoni M, Labbaye C, Bartucci M, Muto G, Peschle C, De Maria R. *Nat Med*. 2008 Nov;14(11):1271-7. Epub 2008 Oct 19. First author 23_Blocking the APRIL circuit enhances acute myeloid leukemia cell chemosensitivity. Bonci D, Musumeci M, Coppola V, Addario A, Conticello C, Hahne M, Grignani F, Grignani F, De Maria R. *Haematologica* 2008. First author 24_Green fluorescent protein incorporation by mouse myoblasts may yield false evidence of myogenic differentiation of human haematopoietic stem cells. Di Castro A, Bonci D, Musumeci M, Grassi F. *Acta Physiol (Oxf)*.2008 25_ A lentiviral vector with a short tropomyosin_I promoter for tracking cardiomyocyte differentiation of human embryonic stem cells. Gallo P, Grimaldi S, Latronico MV, Bonci D, Pagliuca A, Gallo P, Ausoni S, Peschle C, Condorelli G. *Gene Ther*. 2008 26_MicroRNA_133 controls cardiac hypertrophy. Care A, Catalucci D, Felicetti F, Bonci D, Addario A, Gallo P, Bang ML, Segnalini P, Gu Y, Dalton ND, Elia L, Latronico MV, Hoydal M, Autore C, Russo MA, Dorn GW 2nd, Ellingsen O, Ruiz_Lozano P, Peterson KL, Croce CM, Peschle C, Condorelli G. *Nat Med*. 2007 27_Lentiviral Transduction of human postnatal skeletal (stromal, mesenchymal) stem cells: in vivo transplantation and gene silencing. Piersanti S, Sacchetti B., Funari A., Di Cesare S., Bonci D, Cherubini G., Peschle C., Riminucci M., Bianco P., Saggio I. *Calcif Tissue International*. 2006 28_221 and 222 microRNAs inhibit normal erythropoiesis and erythroleukemic cell growth via kit receptor downmodulation. Felli N., Fontana L., Pelosi E., Botta R., Bonci D., Facchiano F., Liuzzi F., Lulli V., Morsilli O., Santoro S., Valtieri M., Liu C._G., Sorrentino A., Croce C.M, Peschle C. *P Natl Acad Sci USA*. 2005 Dec 13; 102(50):18081-18086. 29_ Enforced expression of KDR receptor promotes proliferation, survival and megakaryocytic differentiation of TF1 progenitor cell line. Coppola S, Narciso L, Feccia T, Bonci D, Calabro L, Morsilli O, Gabbianelli M, De Maria R, Testa U, Peschle C. *Cell Death Differ*. 2006; 13(1): 61-74. 30_ Absence of caspase 8 and high expression of PED protect primitive neural cells from cell death. Ricci_Vitiani L, Pedini F, Mollinari C, Condorelli G, Bonci D, Bez A, Colombo A, Parati E, Peschle C, De Maria R.. *J Exp Med*. 2004 Nov 15; 200(10):1257-1266. 31_ Heart infarct in NOD_SCID mice: therapeutic vasculogenesis by transplantation of human CD34+ cells and low dose CD34+KDR+ cells. Botta R, Gao E, Stassi G, Bonci D, Pelosi E, Zwas D, Patti M, Colonna L, Baiocchi M, Coppola S, Ma X, Condorelli G, Peschle C. *FASEB J*. 2004 Sep;18(12):1392-4. 32_ Potential role of APRIL as autocrine growth factor for megakaryocytopoiesis. Bonci D, Hahne M, Felli N, Peschle C, De Maria R. *Blood*. 2004 Nov 15; 104(10):3169-72. 33_Cardiomyocytes. Bonci D, Latronico MV, Condorelli G. *Methods Mol Biol*. 2003; 229:169-79. 34_ 'Advanced' generation lentiviruses as efficient vectors for cardiomyocyte gene transduction in vitro and in vivo. Bonci D, Cittadini A, Latronico MV, Borello U, Aycock JK, Drusco A, Innocenzi A, Follenzi A, Lavitrano M, Monti MG, Ross J Jr, Naldini L, Peschle C, Cossu G, Condorelli G. *Gene Ther*. 2003 Apr;10(8):630-6 First author 35_ Formation of PML/RAR alpha high molecular weight nuclear complexes through the PML coiled_coil region is essential for the PML/RAR alpha mediated retinoic acid response. Grignani F, Gelmetti V, Fanelli M, Rogala D, De Matteis S, Ferrara FF, Bonci D, Grignani F, Nervi C, Pellicci PG. *Oncogene*. 1999 Nov 4;18(46):6313-21 36_Negative regulation of erythropoiesis by caspase mediated cleavage of GATA_1. De Maria R, Zeuner A, Eramo A, Domenichelli C, Bonci D, Grignani F, Srinivasula SM, Alnemri ES, Testa U, Peschle C. *Nature*. 1999 Sep 30;401(6752):489-93. Abstracts 1_ERA_NET_action: PROLIPSY _ Early Detection of Prostate Cancer by Liquid Biopsies. Werner S. (Germany), Zabel M. (Poland), Lianidou E. (Greece), Bonci D. (Italy), Alix Panabieres C. (France), Pantel K. (Germany). Abstract:P. 55. 11th International Symposium on Minimal Residual Cancer in Montpellier in the south of France. ISMRC May 2018 2_ERA_NET_action: PROLIPSY_early detection of prostate cancer by liquid biopsies. Werner, S ; Zabel, M ; Lianidou, E ; Bonci, D ; Alix_Panabieres, C; Pantel, K. Abstract: P.50. CLINICAL & EXPERIMENTAL METASTASIS Volume: 35 Issue: 3 Pages: 197-198, Published: MAR 2018 3_Establishment of patient_derived renal cell carcinoma (RCC) models based on orthotopic xenografts (PDX) and cancer stem cell (CSC) isolation to provide prognostic and predictive information. Simona Di Martino, Gabriele de Luca, Ludovica Grassi, Giulia Federici, Laura De Salvo, Anna Laura Di Pace, Antonio Addario, Giovanni Muto, Manuela Costantini, Mauro Biffoni, Michele Signore, Isabella Sperduti, Steno Sentinelli, Michele Milella, Francesco Cognetti, Michele Gallucci, Ruggero De Maria, and Desiree Bonci. Abstract. *Journal of Clinical Oncology* 2017 35:15_suppl, e16055_e16055_ASCO-meeting 2017 4_Establishment of a predictive patient_derived xenograft model for renal cell carcinoma. Di Martino, S (Di Martino, Simona); De Luca, G (De Luca, Gabriele); Grassi, L (Grassi, Ludovica); Federici, G (Federici, Giulia); De Salvo, L (De Salvo, Laura); Di Pace, AL (Di Pace, Anna Laura); Addario, A (Addario, Antonio); Muto, G (Muto, Giovanni); Costantini, M (Costantini, Manuela); Biffoni, M (Biffoni, Mauro); Signore, M (Signore, Michele); Sentinelli, S (Sentinelli, Steno); Milella, M (Milella, Michele); Gallucci, M (Gallucci, Michele); Bonci, D (Bonci, Desiree)*; De Maria, R (De Maria, Ruggero)*Co_Last authors. *CANCER RESEARCH* Volume: 76 Supplement: 14; Abstract: LB_040, Published: JUL 2016 5_Restoring miR_15a/16 in the NZB mouse model of chronic lymphocytic leukemia reduces disease and enhances drug sensitivity. Erica Salerno, Yao Yuan, Frederick D. Coffman, Brian J. Scaglione, Brian D. Brown, Desiree Bonci and Elizabeth S. Raveche. *CANCER RESEARCH* Volume 70; Supplement:18; Abstract: 4045, DOI: 10.1158/1538_7445.AM10_4045 Published April 2010 6_ "THE MIR_15A/MIR_16_1 CLUSTER CONTROLS PROSTATE CANCER PROGRESSION CONTROL BY TARGETING OF MULTIPLE ONCOGENIC ACTIVITIES." Désirée Bonci, Valeria Coppola, Maria Musumeci, Antonio Addario, Rome, Italy; Leonardo D'Urso, Devis Collura; Cesare Peschle, Ruggero De Maria, Rome, Giovanni Muto. Abstract:528;The Journal of Urology, 181(4S), p. 188; doi.org/10.1016/S0022_5347(09)60542_5 7_ THE ANTIPROLIFERATIVE B CELL TRANSLOCATION GENE 2 (BTG_2) IS UNDER POST_TRANSCRIPTIONAL CONTROL OF MIR_21 IN PROSTATE

CANCER: IMPLICATIONS FOR TUMORIGENESIS. Bonci D, Coppola V, Musumeci M, Addario A, D'Urso L, Collura D, De Maria R, Muto G. Abstract 782; Journal European Urology Supplements 2009 8. MicroRNAs 221 and 222 Inhibit Normal Erythropoiesis and Erythroleukemic Cell Growth Via Kit Receptor Downmodulation. Felli N, Fontana L, Pelosi E, Botta R, Bonci D, Facchiano F, Luzzi F, Lulli V, Morsilli O, Santoro S. Abstract. Journal BLOOD. NEW YORK, volume 106, number: 11, pages 830, year: 2005, publisher: AMERICAN SOCIETY OF HEMATOLOGY 9. APRIL is an autocrine growth factor for megakaryocytes. Bonci D, Felli N, Hahne M, Peschle C, De Maria R. Abstract. Journal BLOOD, volume: 102, number: 11, pages: 140B-140B, year: 2003, organization: AMER SOC HEMATOLOGY 1900 M STREET. NW SUITE 200, WASHINGTON, DC 20036 USA. 10. KDR stimulation by VEGF promotes megakaryocytic differentiation and maturation in normal and leukemic CD34 (+) hematopoietic progenitor cells. Coppola S, Narciso L, Pelosi E, Cerio AM, Morsilli O, Bonci D, Gabbianelli M, De Maria R, Testa U, Peschle C. Abstract. Journal BLOOD, volume: 102, number: 11, pages: 828A-828A, year: 2003, organization: AMER SOC HEMATOLOGY 1900 M STREET. NW SUITE 200, WASHINGTON, DC 20036 USA. 11. Ectopic expression of KDR on TF1 progenitor cell line induces transient expression of endothelial markers and Fas-mediated apoptosis. Coppola S, Fecia T, Narciso L, Bonci D, Conticello C, Testa U, De Maria R, Peschle C. Abstract. Journal BLOOD, volume: 98, number: 11, pages: 556A-556A, year: 2001, organization: AMER SOC HEMATOLOGY 1900 M STREET. NW SUITE 200, WASHINGTON, DC 20036 USA. 12. Death receptor-activated caspases arrest erythroid differentiation through cleavage of the transcription factor GATA-1. De Maria R, Zeuner A, Eramo A, Domenichelli C, Bonci D, Grignani F, Srinivasula SM, Alnemri ES, Testa U, Peschle C. Abstract. Journal EXPERIMENTAL HEMATOLOGY, volume: 27, number: 7, pages: 47-47, year: 1999, organization: ELSEVIER SCIENCE INC 655 AVENUE OF THE AMERICAS, NEW YORK, NY 10010 USA. 13. RATIONAL INTEGRATION OF PHOSPHO-PROTEOMIC DATA FROM LIQUID BIOPSIES AND GENOMIC PROFILING OF LUNG CANCER SPECIMENS TO IMPROVE DIAGNOSTIC, PROGNOSTIC AND MONITORING PROCEDURES. ACC 3. 5 ottobre 2017. Annual meeting. Roma. Michele Signore, Vanesa Gregorc, Désirée Bonci, Ruggero De Maria. 14. Bonci D, Coppola V, Musumeci M, Addario A, Giuffrida R, Memeo L, D'Urso L, Pagliuca A, Biffoni M, Labbaye C, Bartucci M, Muto G, Peschle C, De Maria R. The miR-15A/miR-16-1 cluster controls prostate cancer progression by targeting multiple oncogenic activities. In: Moretti F, Romero M, Belardelli F, ed. International meeting Needs and challenges in translational medicine: filling the gap between basic research and clinical applications. Istituto Superiore di Sanità. Rome, Italy, October 1-3, 2008. Abstract book. Roma: Istituto Superiore di Sanità; 2008. (ISTISAN Congressi 08/C7). p. 85. 15. Ricci-Vitiani L, Pedini F, Molinari C, Condorelli F, Condorelli G, Bonci D, Bez A, Parati EA, Peschle C, De Maria R. Double level of protection from death receptors and inflammatory cytokines in neural stem cells. In: 4. European Workshop on Cell Death. Abstracts; May 11-16, 2004; Istanbul. 2004. 16. International workshop on apoptosis "Death between tulips" in Rolduc, Netherlands, 2006. Abstract: "miR-15 and miR-16 induce apoptosis by targeting BCL2 in prostate cancer" Scientific-Technical dossier ISTISAN 1_SSN 1123_3117 Rapporti ISTISAN 09/5_Mir_221/222-mediated Therapy in melanoma and GIST (Gastrointestinal Stromal Tumor) Tumors :in vitro and in vivo pre-clinical models Alessandra Carè, Désirée Bonci, Cesare Peschle (Sezione A1. Tumori; pg. 41; 270) 2_SSN 1123_3117 Rapporti ISTISAN 09/5_Mir_15 and miR_16 in prostate cancer progression control Ruggero De Maria, Désirée Bonci. Sezione (A1. Tumori; pg. 44; 273) 3_ISSN 0394_9303. Volume 21. Numero 10. Ottobre 2008. pag. 18-19. Fighting prostate cancer. • Scientific public diffusion • 1) CS N.9 / 2017_ISS Tumors, an innovative non-invasive liquid biopsy developed in the ISS laboratories for the diagnosis and active monitoring of cancer therapies • 2) FEBRUARY 13, 2017_Tumors, new liquid biopsy 'made in Italy' tested for diagnosis of SIMONE VALESINI • 3) ANSA editorial staff February 13, 2017: Health and wellness. New liquid biopsy developed at the ISS for cancer diagnosis • 4) ONCOLOGY | EDITORIAL DOTNET | 14/02/2017. A new liquid biopsy for cancer diagnosis developed at ISS • 5) Editorial news.jbprof. By giusygiolotti _ 14 Feb 2017. New liquid biopsy is coming, an innovative diagnostic weapon against cancer • 6) On_line editorial staff: Pazienti.it _ Health News _ February 16, 2017 Liquid biopsy to diagnose tumors immediately • 7) OMAR editorial staff: Osservatorio malattie rare, 22 February 2017 Tumors, developed a non-invasive liquid biopsy for the diagnosis and monitoring of oncological therapies • 8) PROLIPIY_transcan_2 clinical trial dissemination through journals [Project Coordinator: Klaus PANTEL (Germany) University Medical Center Hamburg Eppendorf, Hamburg; Project Partners: Desiree BONCI (Italy) Istituto Superiore di Sanità, Rome; Catherine ALIX_PANABIÈRES (France) University Medical Center of Montpellier, Montpellier; Evi LIANIDOU (Greece) University of Athens, Athens; Maciej ZABEL (Poland), Poznan University of Medical Sciences, Poznan] _ https://media.nature.com/original/magazine_assets/d41586_020_00844_5/d41586_020_00844_5.pdf • 9) The PROLIPIY_Transcan_2 study was presented at the lecture Liquid biopsies at the AACR Annual Meeting 2018 (international congress on cancer) in Chicago 2018 by the Coordinator Klaus Pantel (Title: Early detection of prostate cancer by liquid biopsies. [Project Coordinator: Klaus PANTEL (Germany) University Medical Center Hamburg Eppendorf, Hamburg; Project Partners: Desiree BONCI (Italy) Istituto Superiore di Sanità, Rome; Catherine ALIX_PANABIÈRES (France) University Medical Center of Montpellier, Montpellier; Evi LIANIDOU (Greece) University of Athens, Athens; Maciej ZABEL (Poland), Poznan University of Medical Sciences, Poznan] • 10) PROLIPIY_transcan_2 clinical trial dissemination through newspapers [Project Coordinator: Klaus PANTEL (Germany) University Medical Center Hamburg Eppendorf, Hamburg; Project Partners: Desiree BONCI (Italy) Istituto Superiore di Sanità, Rome; Catherine ALIX_PANABIÈRES (France) University Medical Center of Montpellier, Montpellier; Evi LIANIDOU (Greece) University of Athens, Athens; Maciej ZABEL (Poland), Poznan University of Medical Sciences, Poznan] _ https://www.uke.de/english/departments_institutes/institutes/tumor_biology/research/external_funding/index.html • 11) Dissemination_Project PON_Biligest. Scientific Director of the National Institute of Health: Bonci Desiree. (<https://www.cogentech.it/BiLiGeCT.php>; www.iss.it). Partnership: National Interuniversity Consortium of Innovative Synthesis Methodologies and Processes (CINMPIS, involving the University of Catania and the University of Messina), the Istituto Superiore di Sanità (ISS), the University of Turin (UNITO), the Oncological Institute of the Mediterranean spa (IOM) and CaReBios srl. • 12) _Giornale_La Repubblica_ Prostate cancer, hope in two genes_killer_20 October 2008 • 13) _Giornale_Il Secolo XIX_ Prostate cancer, there is an Italian cure, 20 October 2008 • 14) _Turin, April 27, 2009_PRESS RELEASE_From the commission of the most prestigious American Urological Society in the world AWARDED STUDY OF SAN GIOVANNI BOSCO WITH THE SUPERIOR INSTITUTE OF HEALTH: "very important clinical implications for prostate cancer" S.S.N. Piedmont Region ASL02 Local Health Authority_Turin North • 15) _CS_ANSA_19_10_2008_ Prostate cancer_Italian is the possible key to cure for prostate cancer.

Projects

- Teacher of courses by competence; Tutor in training internships; 1) Teacher_National Training Course for Graduates in Animal Experimentation (course_for external_ISS) 2014 (Called by the Center for Animal Experimentation and Welfare, Istituto Superiore di Sanità) Title: Microsurgery, instrumentation and pre-clinical mouse models in oncology. 2) Lecturer by skills, annual course (For specialists in oncology_ECM) Italian Society of Oncological Urology (SIUro) 9_11 June 2013 Florence 3) Teacher by skills, annual course (For specialists in oncology_ECM) _ Italian Society of Oncological Urology (SIUro) Erice from 16 to 21 April 2013 4) Lecturer by skills, Course title: LIQUID BIOPSY: PRINCIPLES, TECHNOLOGIES AND DIAGNOSTIC PERSPECTIVES 5 and 6 December 2019_HOSPITAL MEDICAL SCHOOL_Rome, Mendel Institute_Registered at n. 55 of the Regional Register of Private Legal Persons held at the Lazio Region _ ISO 9001: 2015 Certified No. 11749/04 / S 5) Lecturer at the Course (For specialists in oncology_ECM) Milan IST_ Titolo_Gran Round prostata _ Milan 2013. Held from (21 October to 9 December), at the IRCCS FOUNDATION NATIONAL TUMOR INSTITUTE ID Code: 81006.1 6) Lecturer at the Course (For specialists in oncology_ECM) The School of Socrates _ Oncology _ Policlinico G. B. Rossi Verona, 5_6 October 2020. Title: Preclinical models for the study of renal cell carcinoma 7) Lecturer at the Course (For specialists in oncology_ECM) _Candiolo_ Title: Open questions in prostate cancer oncology "Candiolo, Turin, 2012 8_M.05.LINC_Speaker / Lecturer for the course "Preceptorship in Renal Oncology", PREX S.p.A. Via Angelo Fava, 25, 20125 Milan, CF / P.IVA 11233530150 (16 and 17 September 2015) 9_ Speaker / Lecturer, to the Society for participation_Everexperience _ Clinical practice in advanced renal cell carcinoma.Istituti Fisioterapici Ospedalieri, Rome, 3/4 February 2014. DueCi Promotion srl, Via A. Corradi, 1340141 Bologna (IT). VAT _ Tax Code 01796411203 10_ Supervisor / Lecturer, to the Society for participation.Everexperience _ Clinical practice in advanced renal cell carcinoma.Hospital Physiotherapeutic Institutes, Rome, 17/18 March 2014. DueCi Promotion srl, Via A. Corradi, 1340141 Bologna (IT). VAT _ Tax Code 01796411203 11_ Supervisor / Lecturer, to the Society for participation.Everexperience _ Clinical practice in advanced renal cell carcinoma.Hospital Physiotherapeutic Institutes, Rome, April 14/15, 2014. DueCi Promotion srl, Via A. Corradi, 1340141 Bologna (IT). VAT _ Tax Code 01796411203 12_Supervisor / Lecturer, to the Company for participation. Everexperience _ Clinical practice in advanced renal cell carcinoma. Hospital Physiotherapeutic Institutes, Rome, 20/21 May 2013.AIM EDUCATION S.r.l.

Via G. Ripamonti n. 129 _ 20141 Milan Patents 1_US No. 61/048,047" Antisense RNA for treating cancer and inhibition of metastasis" Ref: USP98936. 2_US No. 13/290,207 "PSA bearing exosome plasmatic levels a cut off between prostate cancer patients, prostate, hyperplasia and matched controls" • PROJECTS / GRANTS Scientific responsible / principal Investigator / Project manager 1) File 527D (ISS_24/04 / 2009_0000450) (Scientific director and project coordinator) Title CONTROL OF PROSTATIC CARCINOMA PROGRESSION BY MICRORNA 15 AND 16 Start 01/01/2009_End 31/12/2009_Extension 31/10/2012 Amount € 150,000.00 Financial institution Ministry of Health _ Italy_USA Program 2) File 27D 1 (ISS_11/05 / 2009_0000502) (Scientific director and project coordinator) Title IDENTIFICATION OF SIRNA OF P53 FAMILY MEMBERS TO DEVELOP NEW ANTINEOPLASTIC DRUGS Start 01/01/2009_End 31/12/2010_Extension 31/12/2012 Amount € 65,000.00 Financial institution Ministry of Health 3) Dossier S62_Finalized Research_Call for Young Researchers (ISS_07/07 / 2010_0000595) Title _ "ROLE OF MICRORNA IN HUMAN PATHOLOGY AND POTENTIAL MOLECULAR THERAPIES (Scientific Director of the ISS Unit) Start 01/07/2009_End 30/06/2012_Extension 01/07/2013 Amount € 360,000.00 Financial institution Ministry of Health _ Coordinator_MULTIMEDICA HOLDING SPA _ IRCCS 4) File 11US5 (ISS_29/12/2010) (Scientific director and project coordinator) Title: Tissue and exosomal cancer-associated microRNA profiles as innovative prognostic parameters for individual risk assessment of prostate cancer patients and predictive biomarkers for evaluation of molecular targeted agents Start 01/01/2011_End 31/12/2012_Extension 30/06/2014 Amount € 130,000 Financial institution Ministry of Health _ Italy_USA Program 5) File ONC4 / 1 (ISS_29/12 / 2010_0001080) (Scientific director and project coordinator) Title: Cancer stem cells, exosomal vesicles and microRNAs as a new approach for screening, diagnosis and prognostic evaluation of cancer patients Start 01/01/2011_End 31/12/2012_Extension 31/12/2013 Amount € 200,000.00 Financing Body: Ministry of Health_Oncotechnology Program 6) Dossier U2F_Finalized Research_Ordinary Finalized Announcement (Scientific Head of the ISS Unit) Title "NEW ANIMAL MODEL, NANOTECHNOLOGIES AND NEUROIMAGING TO STUDY INTERACTION AND HOMING OF THE HUMAN NEURAL STEM CELLS IN STROKE" Start 16/06/2011_End 15/06/2013_Extension 15/06/2014 Amount € 52,035.00 Financial institution Ministry of Health 7) File 13ONC 8 (Scientific director and project coordinator) Title ANALYSIS OF MICRORNA AND PROTEIN EXPRESSION PROFILES FROM ISOLATED EXOSOMES AS A NEW APPROACH FOR SCREENING, DIAGNOSIS AND PROGNOSIS OF PATIENTS WITH LUNG AND KIDNEY CANCER Start 11/01/2013_End 31/12/2014_Extension 31/03/2015 Amount € 170,000.00 Financing body: Ministry of Health_Oncotechnology Program 8) Book 14NF_Research Finalized_Call for Young Researchers (Scientific coordinator and project coordinator) Title R.F. 2011 "New Tools for Individual Assessment and Treatment assignment in prostate cancer patients" Start 11/11/2014_End 10/11/2017_Extension 10/07/2018 Amount € 342,109.16 Financial institution MINISTRY OF HEALTH 9) File 15ONC 1 (Scientific director and project coordinator) Title: Observational study evaluating the predictive value of the in vitro drug sensitivity test on cancer stem cells and phosphoproteomic profiles in patients with advanced renal cell carcinoma candidates for therapy with multi_kinase inhibitors or mTOR inhibitors Start 01/01/2015_End 31/12/2016 Amount € 220,000.00 Financial institution MINISTRY OF HEALTH 10) File 7C13 (Scientific Head of the ISS Unit) Title ERANET TRANSCAN 2016 "PROLIPS" Start 01/09/2018_End 31/08/2021_Extension 31/08/2022 Amount €1.5 00,000.00 Financial institution RC _ MINISTRY OF HEALTH 11) File Y26_PON_BiLiGeCT (Scientific Head of the ISS Unit),www.ISS.it Title LIQUID BIOPSIES FOR THE CLINICAL MANAGEMENT OF CANCER Start 01/07/2019_End 31/12/2022 Amount € 7.255.211,53 Financial institution MIUR _ Ministry of Education, University and Research _ Cogentech Coordinator. 12) File 15ONC 5 (Scientific director and project coordinator) Title: Tumor stem cells, exosomal vesicles and microRNA as a new approach for screening, diagnosis and prognostic evaluation of cancer patients Start 01/01/2015_End 31/12/2016 Amount € 160,000.00 Financial institution MINISTRY OF HEALTH 13) File 527C / C1 (Scientific director and project coordinator) Title: PILOT PROJECT FOR THE INSTALLATION OF A BIOBANK OF TUMOR STEM CELLS Start 31/05/2007_End 31/12/2009_Extension 31/12/2012 Title: CONTROL OF PROSTATIC CARCINOMA PROGRESSION BY microRNAs 15 AND 16 Line 1 (ISS_05/07 / 2007_0000384) Amount € 188,000.00 Financial institution MINISTRY OF HEALTH

Memberships

From November 1995 to October 1996 she worked as a research assistant in the University Course of the Laboratory of Experimental Biology II, Faculty of Biological Sciences of the University of Perugia, following the students in the technical and theoretical learning of the course itself. May 1999 she obtained the national qualification of Biologist (certified by profession as a Biologist) at the University of Perugia 2016_2020. She obtained the National Scientific Professional Qualification of Associate Professor in Pathological Anatomy, Faculty of Medicine (Call 2012; DD no. 222/2012). 2018_to date Member for the Working group Program, Lung (Liquid biopsy), Alleanza Contro il Cancro (ACC) scientific society (2018 to present). 2021_2031_She obtained the National Scientific Professional Qualification of Associate Professor in General Pathology and Clinical Pathology, Faculty of Medicine (Call 2021; D.D. 553/2021). Awards and acknowledgements 1) In November 1998 she was awarded a prize for the best work done as a degree topic in the study of leukaemia and whose contribution had been ascertained. This prize was awarded to her through a competition launched by the "Laura Cecchetti" Association of the Perugia office. 2) Scientific recognition/award given by the "American Urological Association, AUA", (Chicago, 2009) for the best poster presented in the session: "basic research on prostate cancer" title "THE MIR 15A _ / 16_1 CLUSTER CONTROLS PROSTATE CANCER PROGRESSION CONTROL BY TARGETING OF MULTIPLE ONCOGENIC ACTIVITIES ". Speaker and chairman at congresses and seminars in: 1) Speaker _ "Cell Death on the Beach, 2002, Salobrena, Spain; 2) Speaker _ "National Congress of Urology, AURO" Italy, 2007; 3) Speaker _ "New projects between Italy_USA", 2007, ISS; 4) Speaker _ "European Association of Urology, UAE" 26_29 March, Italy, 2008; 5) Speaker _ "Filling the Gap between Basic Research and Clinical Applications", 2008, ISS; 6) Speaker _ "AURO" Annual Meeting, Giardini di Naxos, ME, Italy 2008; 7) Speaker_microRNAs in Physiology and Disease, December 1, 2009, Bologna; 8) Speaker and chairman _ Cambridge International European meeting on microRNA 2_3 November 2009; 9) Speaker_keystone Symposium miRNA and Cancer February 11_16, 2011. Keystone, USA; 10) Seminar Speaker: Title: The analysis of the protein repertoire of exosomes as a diagnostic, prognostic and monitoring tool for tumors. General Pathology Course, Faculty of Medicine, La Sapienza University, Rome_12 September 2018 11) Speaker _ "National Congress of Urology, AURO" 3_4 October, Firenze, Italy, 2007 12) Speaker _ "Needs and challenges in translational medicine: filling the gap between basic research and clinical applications, October 1_3, 2008 Rome, Istituto Superiore di Sanità Poster speaker in moderate section 1) European association of Urology, UAE "Stockholm, March 17_21, 2009 (Poster in moderate oral section); 2) American Urological Association, AUA ", Chicago, April 25_30, 2009 (Poster in moderate oral section); 3) keystone Symposium miRNA and Cancer February 11_16, 2011, (Poster in moderate oral section) 4) AACR meeting April 2016, New Orleans, LA, USA (Poster in moderate oral section) 5) Meeting of the Ministry of Health_Under_Forty Young Researchers Calls_2016_ (Poster in moderate oral section) 6) Meeting 3th ACC_November_Rome 2018_ (Poster in moderate oral section) 1) Tutor_Torno Subito (Lazio Region): 2018 Call for Paid Internships_Tutor Dr. Desiree Bonci, ISS headquarters, Trainee: Virginia Troisi. (Torno Subito 2017 "identified with the • PARTICIPATION IN CONFERENCES AND WORKSHOPS 1) The 42nd annual meeting of the American Society of Hematology, December 1_5, 2000 San Francisco 2) The 43rd annual meeting of the American Society of Hematology, December 8_11, 2001, Orlando 3) The 45th annual meeting of the American Society of Hematology, December 6_9, 2003 San Diego 4) 47th annual meeting of the American Society of Hematology, Atlanta, December 10_13, 2005 5) 47th annual meeting of the American Society of Hematology, Atlanta, GENTA_Bcl_2 activity _ 2005 6) Cell death and differentiation, Villa Vigoni (Como), 11_13 June 2000 7) Novel Therapeutic approaches in Myelodysplastic Syndrome (MDS), December 1, 2000 San Francisco, educational activity 8) Meeting "Cell death on the beach" Apoptosis Salobrena 23_28 February 2002 9) 2nd national conference SIICA Verona, May 28_31, 2003 10) Aging and human disease November 4_6, 2004 Saertano (SI), Italy 11) Instrumentation Laboratory, Nucleofection: technology, perspectives and developments, 13 November 2003, Milan 12) Signal transduction mechanisms in cell adhesion and differentiation, ABCD company, Rome 21/22 March 2003 13) Stemness the bright and the dark side_EMBO workshop_19_22 september_2006 14) AACR meeting April 2005 in Los Angeles 15) 4th Annual meeting ACC_New technologies and strategies to fight cancer 20_22 November, 2019 Rome 16) Scientific meeting_THE NEW CORONAVIRUS 2019_COVID_19: STATE OF THE ART 1 April 2020, all appointments until September 2020, Istituto Superiore di Sanità _ Webinar 17) AACR meeting April 2016, New Orleans, USA 18) AACR meeting April 2017, Washington, USA 19) AACR annual meeting, 2018, Chicago, USA 20) IEA Spring Webinar_Epidemiology at the time of the coronavirus_6 April 2020 21) IEA Spring Webinar _ One Health Approach to coronavirus _ 22 April 2020 22) IEA Spring_Phase 2 webinar and comparison of experiences contat_tracing 30 April 2020 23) 2020 AACRVirtual Annual Meeting I, April 2020 24) 2020 AACRVirtual Annual Meeting II, June 2020 25) 5th Annual meeting ACC_New technologies and strategies to fight cancer 28_30 October, 2020_ Webinar 26) NCI_Cancer management in Covid_19 pandemic_2 April_2020. 27) Enjoy Webinar series.MD Handerson_May 15, 2020 28) Enjoy Webinar series.MD Handerson _ May 14, 2020 29) Treatment Strategies and Clinical Experiences on

Controlling COVID_19 in China _ Expert Session_Bayer_7_April 2020 30) Enjoy Webinar series.MD Handerson _ May 22, 2020 31) International Conference, Stem Cells: the diverging goals of regenerative medicine and oncology July 1_2, 2010, Rome. 32) 97th_AACR meeting April 2006, Washington, USA 33) Stem cells in tissue homeostasis and cell therapy. Rome La Sapienza University. May 2007 34) Global expression analysis: Latest news on Array technology_BD Biosciences_02_14_2002 35) Academia Medica di Roma_Towards personalized immunotherapy of solid tumors_19_December_2016. 36) School of Advanced Studies, La Sapienza University, Rome _ Translational Medicine: from the Laboratory to the Clinic_13 January_2016. 37) 4th ACTC_meeting_Advances in Circulating Tumor Cells_Liquid Biopsy. Latest Advances and Future Challenges_2_5 october_2019_Corfu, Greece. 38) Allergies, intolerances and celiac disease: between scientific truths and false myths _ ISS_May 2016. 39) ISS_Lazio Region_ The new challenges of cancer research, towards a partnership between Public Bodies and Industry in the Lazio Region. 17 May 2017 Rome 40) Workshop Colomed 2017: Strengthening the Mediterranean partnership in the field of public health. 18_09_2017. ISS, Rome 41) Workshop "Adaptive Studies in Oncology _ 17 November 2017, ISS, Rome 42) AACR meeting April 2015, Philadelphia, USA 43) AACR meeting April 2014, San Diego, USA • REFEREE ACTIVITY 1) Referee for the society Prostate Cancer Charity, Cambridge, Londra per "The Prostate Cancer Charity research awards 2009/10 e 2010/2011" (Progetti finanziati nel 2009/2010 Grant Round Total: £ 1,640,398). 2) Referee per Experimental Biology and Medicine Journal; 3) Referee per Oncogene Journal; 4) Referee per BM Genome Journal; 5) Referee per PloS One Journal; 6) Referee per International Journal of Cancer; 7) Referee per Nature Communications (1Publons certified revision); 8) Referee per Asian Journal of Andrology; 9) Referee per Free Radical Biology & Medicine; 10) Referee per International Journal of Molecular Sciences; 11) Referee per EMBO Journal 12) Referee per Oncotarget Journal 13) Referee per Journal of Extracellular vesicles (4 Publons certified revisions) 14) Referee per Molecular Oncology (2 Publons certified revisions) 15) Referee per The International Journal of Biological Markers (1Publons certified revision) 16) Referee per International Journal of Molecular Sciences 17) Referee per Journal of Experimental & Clinical Cancer Research

Other Relevant Information

Main activities and responsibilities: Scientific manager of multicentre translational research projects. Personnel coordination. Qualified expert/assessor Trial Phase I / II. • Responsible / manager for public procedure (RUP) and Member/president public competitions. ORCID: 0000_0002_2472_5140; Scopus ID:6505877879