EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name Di Cosimo Serena, MD, PhD

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Nationality Italian

Date of birth

WORK EXPERIENCE

01/01/2022 - today

Fondazione IRCCS Istituto Nazionale dei Tumori - Milano

Via G. A. Amadeo 42, 20133 Milano (Italy)

S.C. Anatomia Patologica 2 - Department of Advanced Diagnostics

Full staff position - Dirigente medico

Implementation of tumor tissue and circulating biomarkers in clinical trials, use of high throughput technologies for personalized medicine, real world data studies.

01/03/2022 - 31/10/2022

Fondazione IRCCS Istituto Nazionale dei Tumori - Milano

Via G. A. Amadeo 42, 20133 Milano (Italy)

S.S. Integrated Biology Platform, Department of Applied Research and Technological Development

Full staff position – Dirigente medico

Discovery and development of tumor tissue and liquid biopsy biomarkers, use of high throughput technologies, real world data in the health care system with a special focus on breast cancer.

31/12/2019 - 28/02/2022

Fondazione IRCCS Istituto Nazionale dei Tumori - Milano

Via G. A. Amadeo 42, 20133 Milano (Italy)

UO10 Biomarkers, Department of Applied Research and Technological Development

Clinical researcher (Piramide della Ricerca, maximum level Ds6)

Concept, design and leadership of translational research studies on liquid biopsy, tumor heterogeneity, microenvironment and treatment de-escalation in women with breast cancer.

12/01/2017 - 30/12/2019

Fondazione IRCCS Istituto Nazionale dei Tumori - Milano

Via G. A. Amadeo 42, 20133 Milano (Italy)

Department Applied Research and Technological Development /Scientific Directorate

Professional collaborator

Liquid biopsy for breast cancer prognostication and treatment assessment.

01/01/2012 - 31/12/2016

Fondazione IRCCS Istituto Nazionale dei Tumori - Milano

Via G. Venezian 1, 20133 Milano (Italy)

Department of Oncology

Attending physician – Dirigente medico con incarico quinquennale art. 15 Septies (Highly specialized for breast cancer care and research, Alta Specializzazione)

Management and care new breast cancer consults/follow-up; participation as on-service physician for department of oncology service; training and supervision of oncology research fellows/residents; design and leadership of phase II-III breast cancer clinical trials.

01/01/2007 - 31/12/2011

Vall d'Hebron University Hospital

Paseo Vall d'Hebron 119-129, 08035 Barcelona (Spain)

Department of Oncology

Attending physician

Management and care of new breast cancer consults/follow-up; overview of acute care of hospitalized breast cancer patients; participation as on-service physician for department of oncology service; training and supervision of 3-6 clinical oncology research fellows/residents; design and leadership of phase 0-I- II-III breast cancer clinical trials.

09/2007 - 07/2012

SOLTI - Innovative Breast Cancer Research Group

Calle Balmes 89, 08008 Barcelona (ES)

Scientific advisor

Breast cancer translational studies design and implementation

04/2010

National Cancer Institute - National Institute of Health (NCI/NIH)

10 Center Dr, Bethesda, MD 20814 (USA)

Medical Branch (Building 10)

Winner of the international competition for a breast cancer tenure track position

01/05/2006 - 31/12/2006

Istituto Nazionale dei Tumori Regina Elena

Via E. Chianesi 53, 00128 Roma (Italy)

Division of Medical Oncology A

Clinical fellow

Management and care of new patient/follow-up visits; management and acute care of hospitalized oncology patients; participation in the screening, enrolling and care process of clinical trial patients; supervision of clinical and research work of junior oncology residents.

EDUCATION AND TRAINING

28/03/2018 - today

State issued Qualification as Associate Professor

Ministry of Instruction, University and Research

Hematological, oncological and reumathological disease

01/10/2017 - 28/09/2021

Doctor of Philosophy (PhD)

The Open University, Milton Keynes (UK)

PhD course in "Life, Health & Chemical Sciences"

01/05/2003 - 30/04/2006

Fellowship (Breast Cancer)

Istitut de Recerca – Hospital Universitario Vall d'Hebron, Barcelona (ES)

"The PI3K/Akt/mTOR as a new therapeutic target for breast cancer"

01/10/2000 - 26/10/2004

Board Certification in Medical Oncology

Residency in Medical Oncology

University of Rome "La Sapienza"; Istituto Nazionale dei Tumori Regina Elena

First session 2001

Medical License

University of Rome Campus Bio-Medico, Rome (IT) Registration to physician and surgeons order

09/1994-19/07/2000

Degree in Medicine (MD)

University of Rome Campus Bio-Medico, Rome (IT)

Experimental thesis: "Mechanisms of DNA repair and PARP inhibition" (summa cum laude and recommendation to publication)

LANGUAGES	ITALIAN	SPANISH	CATALAN	ENGLISH
Reading skills	Mother tongue	Native	Intermediate	Advanced
Writing skills	Mother tongue	Native	Intermediate	Advanced
Verbal skills	Mother tongue	Native	Intermediate	Advanced

SCIENTIFIC JOURNALS

Editorial board

The Breast (Section Editor); Tumori Journal (Section Editor).

Reviewer

Lancet; Annals of Oncology; Nature Communication; Clinical Cancer Research; Cancer Research.

HONORS AND ACHIEVEMENTS

10/2023 Fellow of European Society of Medical Oncology (FESMO) award

06/2021-12/2022 Academic Medical Menager of the *DiGital Institute for Cancer Outcomes* Research (DigiCore)

01/2021 Top scientist recognition from the Scientific Directorate of Fondazione IRCC Istituto Nazionale dei tumori

01/2020 Top scientist recognition from the Scientific Directorate of Fondazione IRCC Istituto Nazionale dei tumori

29/10/2018 Personal invitation of the President of the Italian Republic to join the celebration of the National Day for Research at the Quirinale

26/09/2018 Testimonial of the Italian Association for Cancer Research for the "Breast cancer campaign".

15/04/2015 Young Researcher Award Fondazione IRCCS Istituto Nazionale dei Tumori, Milan 06/11/2014 Personal invitation of the President of the Italian Republic to join the celebration of the National Day for Research at the Quirinale

01/2015 Selection of one of the figures of the article "Combination of the mTOR inhibitor ridaforolimus and the anti-IGF1R monoclonal antibody dalotuzumab: preclinical characterization and phase I clinical trial" for the cover of the 01/01/2015 issue of Clinical Cancer Research 2005 Young Investigator Award of the American Society of Clinical Oncology (ASCO) 2003 Scholarship of the Italian Association of Medical Oncology (AIOM)

SOCIAL SKILLS AND COMPETENCES

From 1998 to 2000 she has served as tutor for students of Medicine at the University of Rome Campus Bio-Medico. In 2000 she collaborated with the Association for the Fight against Tumors in the Youth (ALTEG). During 2006-2009 she designed, promoted and implemented the Young Oncologists Survey project and the Vesalius Dinner program for young oncologists under the umbrella of the European Society for Medical Oncology (ESMO). Since 01/01/2007 she trains activities and supervision of residents and young researchers. Since 06/2021 she serves as pro bono medical advisor for the patient advocacy *Europa Donna Academy*.

ORGANIZATIONAL SKILLS AND COMPETENCES

She is an active member of the European Society of Medical Oncology (ESMO). She served as chairman of ESMO Young Oncologist Committee for two consecutive terms (2006 -2010). She joined the ESMO Board of Directors in the same period. Already member of the ESMO Educational Committee for Breast Cancer, and the ESMO European Policy Committee. She has been elected as a member of the Nominating Committee for the ESMO President (2013-2014). She is the secretariat of the Regional Board of Director of Associazione Italiana di Oncologia Medica (AlOM) Lombardia and she has been part of the AlOM Clinical Research Working Group. She is an active member of Società Italiana di Cancerologia (SIC). Since 2011 she sits in the Breast International Group (BIG) Assembly for breast cancer research. She sits in the steering committees of Neo-and ALTTO (International Principal Investigator), Neo-Phoebe, Neo-PARP, Neo-Eribulin, NSABP-FB7, PARSIFAL, PHERGain international clinical trials. Already academic manager for DigiCore, she actually serves as medical advisor for MEDSIR (Medica Scientia Innovation Research) projects on personalized medicine.

TECHNICAL SKILLS AND COMPETENCES

Practical and up-to-date knowledge of breast cancer and its diagnostic procedures and treatment options. Clinical diagnosis and therapy of breast diseases.

Direct experience in the main cell biology techniques: cell cultures, functional tests with cell lines, extraction and analysis of nucleic acids and proteins. Direct knowledge of the main molecular analysis methodologies based on PCR, hybridization and sequencing (NGS).

Planning and implementation of clinical and pre-clinical translational research studies. Collection and critical analysis of experimental, clinical and real-world data.

Team work, project drafting, set-up and execution, budget management, data presentation and reporting of national and international projects.

Use of the main tools for advanced bibliographic research. Advanced PC skills.

SCIENTIFIC PRODUCTION

Author and co-author (Orcid 0000-0002-4666-8052; Scopus Author Id: 16244604000) of **200 publications** in scientific journals (**H index = 39.0**) concerning the development of therapeutic strategies for breast cancer through the model of neoadjuvant therapy and the application of omics acquisitions for prognostic and predictive purposes.

GRANTS

PRINCIPAL INVESTIGATOR (PI)/co-PI)

2024 – PNRR-POC-2023-12378113 "A composite assay for HER2-positive early-stage breast cancer management"

2024 - Grant "Line IV of Institutional Research": "Artificial intelligence applied to HER2-positive breast cancer biomarkers"

2020 - Grant "Line IV of Institutional Research": "Cancer and COVID-19 (Care)"

2020 – Grant within the "Line I of Institutional Research": "Tissue bacteria in breast cancer progression and presentation. The BactHERia project"

2019 – Grant within the "Line III of Institutional Research": A multicenter Registry for translation research and clinical support of Extra rare Tumours in Italy (RETI): metaplastic carcinoma of the breast"

2018 – Bando per la valorizzazione della ricerca istituzionale: "Circulating microRNAs to identify HER2 positive breast cancer patients exquisitely responsive to trastuzumab"

2017 – AIRC IG 20774 "Immune response offers major clues for treatment de-escalation in HER2 positive breast cancer patients"

2016 – AIOM national research grant "Gene expression profiling of HER2 and Hormone Receptor positive breast cancer fit to individualized HER2 targeted treatment"

2013 – "My First AIRC (MFAG) Grant "Circulating miRNAs to predict outcome and to guide treatment of breast cancer patients on preoperative systemic treatment"

2013 – "Profiling of triple negative breast cancer patients with residual disease after neoadjuvant chemotherapy" funded by 5x1000 Ministry of Health

COLLABORATOR

2023 – European Union Next Generation EU, Missione 4, Componente 1, "Fondo PRIN 2022" – HIMALAYA – ID 20228MH- WPZ - CUP B53D23002380006

2022 – European grant (group leader with assigned budget) – EU4H-2021-PJ-15: Cancer Diagnostic and Treatment for All – Genomic for Public Health (CAN.HEAL)

2021 – "Rosanna project: cardiotoxicity in young breast cancer patients" funded by Associazione Italiana per la Ricerca sul Cancro (AIRC)

2019 – "Convergence of tumor & host features as a clue for triple negative breast cancer: the liquid biopsy approach" funded by AIRC

2019 – "Bando di finanziamento per progetti di innovazione in ambito sanitario e socio sanitario - I controlli periodici (follow-up) dopo la diagnosi e le terapie in pazienti liberi da malattia e asintomatici: verso una personalizzazione delle strategie di follow-up" funded by Regione Lombardia

2018 – "Gender difference in side effects of immunotherapy: a possible clue to optimize cancer treatment (G-DEFINER)" funded by the European Union's Horizon 2020 programme

2018 – Bando per la valorizzazione della ricerca istituzionale: "Circulating microRNAs for early detection and prediction of trastuzumab and/or lapatinib-induceed cardiotoxicity in patients with HER2-positive early-stage breast cancer"

2017 – "Extracellular matrix regulation of myeloid cell contexture shapes the fate of oncogenic events" funded by 'Associazione Italiana per la Ricerca sul Cancro (AIRC) 2017 – "Targeting the inhibitor of apoptosis proteins (IAPs) as a novel strategy to hinder

microenvironment-dependent cancer aggressiveness" funded by 5x1000 Ministry of Health. 2016 — "Improving immunotherapy of solid tumors by targeting the ERA-NET: Aligning national/regional translational cancer research programs and activities TRANSCAN-2 - Immunosuppressive tumor microenvironment: from pre-clinical "proof-of-concept" to the development of phase Ib study"

2016 – "Monitoring disease progression in triple negative breast cancer by profiling liquid biopsies and tumor lesions" funded by Associazione Italiana per la Ricerca sul Cancro (AIRC) 2015 – "Study of HER2 addiction-related features implicated in trastuzumab benefit" funded by Associazione Italiana per la Ricerca sul Cancro (AIRC) 2010 "RATHER: rational therapy for breast cancer" funded by "European Commission's 7th Framework Programme of Research and Development"

PATENTS

COMBINATION OF A PHOSPHOINOSITIDE 3-KINASE INHIBITOR AND AN ANTIDIABETIC COMPOUND - Pub.No: US 2012/0059005A1.
FIRMA GENOMICA PER LA PROGNOSI DEL CARCINOMA MAMMARIO HER2-POSITIVO – Pub. No. 102024000027186

The undersigned Serena Di Cosimo, born on December 1, 1975 in Frosinone, fiscal code DCSSRN75T41D810U, and living in Corso di Porta Nuova 32, 20121 Milano (Italy)

DECLARES

to be aware of the criminal law penalties provided for by Art. 76 of Presidential Decree No. 445/2000 in relation to the cases of false documents and false declarations listed therein and that the information listed below are truthful.

Milan, July 23rd 2025

Serena Di Cosimo, MD, PhD