

Il presente curriculum ha la funzione di autocertificazione ai sensi del D.P.R. 445/2000

PERSONAL INFORMATION



Carolina Lanza
LNZCLN92S59D086R
Date of birth 19/11/1992
Nationality: Italian

EDUCATION AND TRAINING

11/2019 –11/2023 **Post-graduate School of Diagnostic and Interventional Radiology, University of Milan, Italy (70/70 L)**

07/2018 **Degree at the School of Medicine and Surgery, Università Vita-Salute San Raffaele, Milan, Italy (110/110 L)**

2007 - 2012 **High School Diploma** Liceo classico “Bernardino-Telesio” Cosenza, Italy

WORK EXPERIENCE

1/1/2025-actual: **Radiology Consultant** at Fondazione IRCCS Cà Granda, Ospedale Maggiore Policlinico, University of Milan, Milan (Italy)

9/2023-31/12/2024: **Freelance physician consultant** of radiology, Radiology Unit, Fondazione IRCCS Cà Granda, Ospedale Maggiore Policlinico, University of Milan, Milan.

1/7/2023- 30/9/2023 **Visiting Research and Fellow** Department of Interventional Radiology, Curry Cabral Hospital, Lisboa, Portugal; Tiago Bilihim MD

01/2022- 06/2023 **Radiology resident in Interventional Radiology** IRCCS Policlinico di Milano Ospedale Maggiore, Fondazione IRCCS Ca Granda, Università degli studi di Milano, Milan (Italy) Prof. Gianpaolo Carrafiello MD

11/2021- 12/2021 **Radiology resident in Pediatric Radiologic Unit** IRCCS Policlinico di Milano Ospedale Maggiore, Fondazione IRCCS Ca Granda, Università degli studi di Milano, Milan (Italy) Prof. Gianpaolo Carrafiello MD

09/2021- 10/2021 **Radiology resident in Neuroradiology Unit** IRCCS Policlinico di Milano Ospedale Maggiore, Fondazione IRCCS Ca Granda, Università degli studi di Milano, Milan (Italy) Prof. Fabio Triulzi MD

07/2021- 08/2021 **Radiology resident in Musculoskeletal Radiology Unit** Ospedale CTO, ASST Pini-CTO, Università degli studi di Milano, Milan (Italy) Andrea Zagarella MD

05/2021- 06/2021 **Radiology resident in Cardioradiology Unit** IRCCS Centro Cardiologico Monzino, Università degli studi di Milano, Milan (Italy) Gianluca Pontone MD

11/2020- 05/2021 **Radiology resident in Diagnostic Radiology** ASST Grande Ospedale Metropolitano Niguarda, Università degli studi di Milano, Milan (Italy) Prof. Angelo Vanzulli MD

11/2019- 10/2020 **Radiology resident in Diagnostic Radiology** Istituto Europeo Oncologico (IEO), Università degli studi di Milano, Milan (Italy) Prof. Massimo Bellomi MD

PERSONAL SKILLS

Native Language: Italian

Other languages: Level B2 certificate in ESOL International (B2 CEFR)

PUBLICATIONS

Lanza Carolina, Velio Ascenti, Gaetano Valerio Amato, Giuseppe Pellegrino, Sonia Triggiani, Jacopo Tintori, Cristina Intrieri, Salvatore Alessio Angileri, Pierpaolo Biondetti , Serena Carriero, Pierluca Torcia, Anna Maria Ierardi, Gianpaolo Carrafiello "All You Need to Know About TACE: A Comprehensive Review of Indications, Techniques, Efficacy, Limits, and Technical Advancement." Journal of clinical medicine vol. 14,2 314. 7 Jan. 2025, doi:10.3390/jcm14020314

Lanza, Carolina, Salvatore Alessio Angileri, Pierpaolo Biondetti, Andrea Coppola, Francesco Ricapito, Velio Ascenti, Gaetano Amato, Giuseppe Pellegrino, Lucilla Violetta Sciacqua, Andrea Vanzulli, Serena Carriero, Massimo Venturini, Anna Maria Ierardi, Gianpaolo Carrafiello "Percutaneous microwave ablation of HCC: comparison between 100 and 150 W technology systems." La Radiologia medica vol. 129,12 (2024): 1916-1925. doi:10.1007/s11547-024-01927-3

Velio Ascenti, Anna Maria Ierardi, Maryam Alfa-Wali, **Carolina Lanza** , Erika Kashef
Damage Control Interventional Radiology: The bridge between non-operative management and damage control surgery. CVIR Endovascular, 2024, 7(1), 71 DOI: 10.1186/s42155-024-00485-z

Ierardi, A.M., Ascenti, V., **Lanza, C.**, Carriero, C., Amato, G., Pellegrino, G., Torcia, P., Carrafiello, G. Is it a complication or a consequence - a new perspective on adverse outcomes in Interventional Radiology. CVIR Endovasc 7, 6 (2024). <https://doi.org/10.1186/s42155-023-00417-3>

Computed-Tomography-Guided Lung Biopsy: A Practice-Oriented Document on Techniques and Principles and a Review of the Literature

Lorenzo Saggianti, Pierpaolo Biondetti , **Carolina Lanza** , Serena Carriero , Velio Ascenti , Filippo Piacentino , Anas Shehab , Anna Maria Ierardi , Massimo Venturini , Gianpaolo Carrafiello

A comprehensive diagnostic approach to differentiate intrauterine arteriovenous malformation in cases of enhanced myometrial vascularity

Carolina Ercolino, Enrico Ferrazzi, Manuela Wally Ossola, Eugenia Di Loreto, Pierpaolo Biondetti , Serena Carriero , Ottavio Cassardo , **Carolina Lanza** , Francesco D'Ambrosi

Endovascular Management of Pelvic Trauma: The Interventional Radiology Point of View

Velio Ascenti, **Carolina Lanza**, Pierpaolo Biondetti, Jean Marc Pernes, Matteo Renzulli, Costantino Del Giudice, Gianpaolo Carrafiello and Anna Maria Ierardi

Journal of Endovascular Resuscitation and Trauma Management, 2024, 8(1), pp. 1–6

The role of artificial intelligence in radiology and interventional oncology

Lanza, C., Carriero, S., Biondetti, P., Angileri SA., Ierardi, A.M., Carrafiello, G.

Artificial Intelligence for Medicine: An Applied Reference for Methods and Applications, 2024, pp. 193–200

Anna Maria Ierardi, **Carolina Lanza**, Marco Calandri, Dimitrios Filippiadis, Velio Ascenti, Gianpaolo Carrafiello . "ESR Essentials: image guided drainage of fluid collections-practice recommendations by the Cardiovascular and Interventional Radiological Society of Europe." European radiology, 10.1007/s00330-024-10993-0. 1 Aug. 2024, doi:10.1007/s00330-024-10993-0

Carolina Lanza, Salvatore Alessio Angileri, Jacopo Fumagalli, Pierpaolo Biondetti , Serena Carriero, Velio Ascenti, Anna Maria Ierardi, Hayato Kurihara and Gianpaolo Carrafiello. REBOA: A Device to Gain Time. Journal of Endovascular Resuscitation and Trauma Management DOI: <https://doi.org/10.26676/jevtm.18304>

Biondetti, P., Ierardi, A., Casiraghi, E., Caruso A., Grillo P., Carriero, C., Lanza, C., Angileri, S.A., Sangiovanni, A., Iavarone, M., Guzzardi, G., Carrafiello G. et al. "Clinical Impact of a Protocol Involving Cone-Beam CT (CBCT), Fusion Imaging and Ablation Volume Prediction in Percutaneous Image-Guided Microwave Ablation in Patients with Hepatocellular Carcinoma Unsuitable for Standard Ultrasound (US) Guidance." *Journal of clinical medicine* vol. 12,24 7598. 9 Dec. 2023, doi:10.3390/jcm12247598

Angileri SA, **Lanza C**, Carriero S, Biondetti P, Ascenti V, Pellegrino G, Caruso A, Carrafiello G, Ierardi AM. Performance and Safety of a Reflux-Control Microcatheter Used to Perform DEB-TACE with LUMITM Beads in HCC Patients: Preliminary Experience. *Journal of clinical medicine* vol. 12,20 6630. 19 Oct. 2023

De Grandis MC, Ascenti V, **Lanza C**, Di Paolo G, Galassi B, Ierardi AM, Carrafiello G, Facciorusso A, Ghidini M. Locoregional Therapies and Remodeling of Tumor Microenvironment in Pancreatic Cancer." *International journal of molecular sciences* vol. 24,16 12681. 11 Aug. 2023, doi:10.3390/ijms241612681

Biondetti P, Ascenti V, Shehab A, Ierardi AM, Carriero S, **Lanza C**, Angileri SA, Guzzardi G, Carrafiello G. Percutaneous Microwave Ablation of Hepatocellular Carcinoma with "DoubleFusion" Technique: Technical Note and Single-Center Preliminary Experience. *Diagnostics(Basel)*. 2023 Jul

Biondetti P, **Lanza C**, Carriero S, Arrigoni F, Bevilacqua M, Ruffino A, Triggiani S, Sorce A, Coppola A, Ierardi AM, Venturini M, Guzzardi G, Carrafiello G. Efficacy and Safety of Transarterial Chemoembolization with DC Beads LUMI in the Treatment of HCC: Experience from a Tertiary Centre." *Technology in cancer research & treatment* vol. 22 (2023): 15330338231184840.

Ierardi AM, Coppola A, Renzulli M, Piacentino F, Fontana F, Paladini A, Guzzardi G, Semeraro V, Di Stasi C, Giurazza F, Niola R, Stefanini M, Contegiacomo A, Carruba C, Discalzi A, Ciferri F, Carriero S, **Lanza C**, Biondetti P, Coniglio G, Fonio P, Venturini M, Carrafiello G, Del Giudice C. Effectiveness and Safety of Different Vascular Closure Devices: Multicentre Prospective Observational study. *Cardiovasc Intervent Radiol*. 2023 Jul;46(7):827-834.

Hörer TM, Ierardi AM, Carriero S, **Lanza C**, Carrafiello G, McGreevy DT. Emergent vesselembolization for major traumatic and non-traumatic hemorrhage: Indications, tools and outcomes. *Semin Vasc Surg*. 2023 Jun;36(2):283-299.

Lanza C, Carriero S, Biondetti P, Angileri SA, Carrafiello G, Ierardi AM. Advances in Imaging Guidance During Percutaneous Ablation of Renal Tumors. *Semin Ultrasound CT MR*. 2023 Jun;44(3):162-169.

Ierardi AM, Hohenstatt S, Caranci F, **Lanza C**, Carriero S, Vollherbst DF, Möhlenbruch MA, Carrafiello G, Paolucci A. Pressure cooker technique in cerebral AVMs and DAVFs: different treatment strategies. *Radiol Med*. 2023 Feb.

Piacentino F, Fontana F, Zorzetto G, Saccomanno A, Casagrande S, Franzi F, Imperatori A, **Lanza C**, Carriero S, Coppola A, Ierardi AM, Carrafiello G, Venturini M. Could Maximum SUV be Used as Imaging Guidance in Large Lung Lesions Biopsies? Double Sampling Under PETCT/XperGuide Fusion Imaging in Inhomogeneous Lung Uptaking Lesions to Show That it can Make a Difference. *Technol Cancer Res Treat*. 2023 Jan-Dec;22

Lanza C, Carriero S, Buijs EFM, Mortellaro S, Pizzi C, Sciacqua LV, Biondetti P, Angileri SA, Ianniello AA, Ierardi AM, Carrafiello G. Robotics in Interventional Radiology: Review of Current and Future Applications. *Technol Cancer Res Treat*. 2023 Jan-Dec

Carriero S, **Lanza C**, Pellegrino G, Ascenti V, Sattin C, Pizzi C, Angileri SA, Biondetti P, Ianniello AA, Piacentino F, Lavorato R, Ierardi AM, Carrafiello G. Ablative Therapies for Breast Cancer: State of Art. *Technol Cancer Res Treat*. 2023 Jan-Dec;22

Association between anatomic variations of extrahepatic and intrahepatic bile ducts: Do look up!

Matteo Renzulli, Nicolò Brandi, Stefano Brocchi, Caterina Balacchi, **Carolina Lanza**, Irene Pettinari, Bernardo Stefanini, Giampaolo Carrafiello, Fabio Piscaglia, Rita Golfieri, Giovanni Marasco
Journal of anatomy, 10.1111/joa.13808. 20 Jan. 2023, doi:10.1111/joa.13808

Lanza C, Carriero S, Ascenti V, Tintori J, Ricapito F, Lavorato R, Biondetti P, Angileri SA, Piacentino F, Fontana F, Venturini M, Ierardi AM, Carrafiello G. Percutaneous Application of High Power Microwave Ablation With 150 W for

the Treatment of Tumors in Lung, Liver, and Kidney: A Preliminary Experience. *Technol Cancer Res Treat*. 2023 Jan-Dec;22:15330338231185277.

The European Institute of Oncology Thyroid Imaging Reporting and Data System for Classification of Thyroid Nodules: A Prospective Study. *J. Clin.*

De Fiori, E.; **Lanza, C.**; Carriero, S.; Tettamanzi, F.; Frassoni, S.; Bagnardi, V.; Mauri G.
Med. 2022, 11, 3238. <https://doi.org/10.3390/jcm11113238>

Imaging-Guided Percutaneous Puncture and Embolization of Visceral Pseudoaneurysms: Feasibility and Outcomes.

Carriero S, **Lanza C**, Biondetti P, Renzulli M, Bonelli C, Piacentino F, Fontana F, Venturini M, Carrafiello G, Ierardi AM
Journal of clinical medicine vol. 11,11 2952. 24 May. 2022,doi:10.3390/jcm11112952

A segmentation tool for pulmonary nodules in lung cancer screening: Testing and clinical usage

Noemi Garau, Chiara Paganelli, Paul Summers, Danny Bassis, **Carolina Lanza**, Marta Minotti, Elvio De Fiori, Guido Baroni, Cristiano Rampinelli
Biomedical Physics (AIFB) vol. 90 (2021): 23-29. doi:10.1016/j.ejmp.2021.08.011

Emergency tips recanalisation and gastroesophageal varices embolisation with an ethylene vinyl alcohol copolymer agent (Squid) and detachable coils.

Venturini M, Augello L, **Lanza C**, Curti M, Coppola A, Piacentino F, De Cobelli F.
Eur Radiol Exp 4, 67 (2020). <https://doi.org/10.1186/s41747-020-00196-9>

Elective Embolization of Splenic Artery Aneurysms with an Ethylene Vinyl Alcohol Copolymer Agent (Squid) and Detachable Coils.

Venturini M, Marra P, Augello L, Colarieti A. Guazzarotti G, Palumbo D, **Lanza C**, Melissano G. Chiesa R. De Cobelli F.
Journal of vascular and interventional radiology : JVIR vol. 31,7 (2020): 1110-1117. doi:10.1016/j.jvir.2019.12.797

Embolization of 2 Coexisting Intraparenchymal Renal Artery Aneurysms with an Ethylene Vinyl Alcohol Copolymer Agent (Squid) and Coils.

Venturini M, Della Corte A, **Lanza C**, Fontana F, Chiesa R, De Cobelli F.
Cardiovascular and interventional radiology vol. 43,6 (2020): 942-944. doi:10.1007/s00270-020-02458-w

Transcatheter embolization with Squid, combined with other embolic agents or alone, in different abdominal diseases: a single-center experience in 30 patients

Massimo Venturini, **Carolina Lanza**, Paolo Marra, Anna Colarieti, Marta Panzeri, Luigi Augello, Simone Gusmini, Marco Salvioni, Francesco De Cobelli and Alessandro Del Maschio Venturini et al. *CVIR Endovascular* (2019) 2:8

Covered stenting and transcatheter embolization of splenic artery aneurysms in diabetic patients: A review of endovascular treatment of visceral artery aneurysms in the current era.

Venturini M, Marra P, Colarieti A, Agostini G, **Lanza C**, Augello L, Gusmini S, Salvioni M, Melissano G, Fiorina P, Chiesa R, De Cobelli F, Del Maschio A. *Pharmacol Res*. 2018 Sep;135:127-135.

Allo- and auto-percutaneous intra-portal pancreatic islet transplantation (PIPIT) for diabetes cure and prevention: the role of imaging and interventional radiology.

Venturini M, Sallemi C, Marra P, Palmisano A, Agostini G, **Lanza C**, Balzano G, Falconi M, Secchi A, Fiorina P, Piemonti L, Maffi P, Esposito A, De Cobelli F, Del Maschio A. *Gland Surg*. 2018 Apr;7(2):117-131.

Endovascular Repair of 40 Visceral Artery Aneurysms and Pseudoaneurysms with the Viabahn StentGraft: Technical Aspects, Clinical Outcome and Mid-Term Patency.

Venturini M, Marra P, Colombo M, Panzeri M, Gusmini S, Sallemi C, Salvioni M, **Lanza C**, Agostini G, Balzano G, Tshomba Y, Melissano G, Falconi M, Chiesa R, De Cobelli F, Del Maschio A. *Cardiovasc Intervent Radiol*. 2018 Mar;41(3):385-397.

ORAL PRESENTATIONS

Invited speaker at the ECR 2025 with the presentation "Cases presentation: my best cases" in the section "Acute pulmonary embolism :what is the new?"

Invited speaker at the ECR 2025 with the presentation ""Treatment of visceral artery aneurysm: Tips and tricks"

Invited speaker at the 51st National Congress of the Italian Society of Medical Radiology (SIRM) of the workshop entitled 'Abdominal Drainage from A to Z (Clinical Applications)'. The workshop focused on techniques and indications in percutaneous procedures of placement of abdominal drains.

Organization of the 'Winter School' at the University of Milan. The course, aimed at medical students and trainees interested in learning the basics of interventional radiology. interventional radiology, consisted of a theoretical part during which the basics of the main endovascular and percutaneous endovascular and percutaneous procedures of interventional radiology and a practical part by means of the use of simulators and practical models. 21-02-2024 al 23-02-2024

Participation as a tutor in ECR (European Congress of Radiology) 2024 at 'The Cube'.

Participation, as tutor, during the SIRM (Italian Society of Radiology Medical and Interventional Radiology) 2024 to an area dedicated to interventional radiology simulation paths interventional radiology. The tutor's activity includes support during the various practical simulation activities introducing and guiding participants in the correct use of catheters, stents, balloons and embolising agents with the help of simulators and models.
20-06-2024 to 23-06-2024

Invited speaker at ECR International Congress (European Congress of Radiology) 2024 with paper entitled 'Percutaneous treatment of neurogenic pain due to discal herniation (Advanced Session: Percutaneous Interventions - IR strategies in particular situations)'.
21-06-2024

Invited speaker at the 51st National Congress of the Italian Society of Medical Radiology (SIRM): Non-traumatic supradiaphragmatic emergencies (pulmonary embolism).
21-06-2024

Invited coordinator at the international congress CIRSE (Cardiovascular and Interventional Radiological Society of Europe) 2024 of the workshop: Hands-on Device Training session 'Embolization: particulate agents'.
14-09-2024 to 15-09-2024

Invited speaker at the International CIRSE Congress (Cardiovascular and Interventional Radiological Society of Europe) 2024 at a panel discussion entitled 'Working during pregnancy and lactation: experiences around the world'. The discussion was based on an evaluation of the main legislative decrees currently in force in the various European countries concerning the principles of radiation protection during pregnancy and lactation in the field of interventional radiology, with a focus on the main differences and improvement measures to be taken.

TEACHING ACTIVITIES

Phd course lecture in "Experimental imaging and translational research using murine models"
Varese, Università degli studi di Insubria 27/6/2023

The Cube tutor- ECR 2022, 2024, 2025- Vienna, Austria

Adjunct Professor at Università degli Studi di Milano, Milan (Italy) (2024-2025)

AWARDS

11/2022 Cum Laude oral presentation Award Winning 50 SIRM National Congress, Rome (Italy)

SCIENTIFIC SOCIETY ACTIVITIES

Endovascular Resuscitation and Trauma Management (EVTM) since 2020
Cardiovascular and Interventional Radiological Society of Europe (CIRSE) since 2019
European Society of Radiology (ESR) since 2019
Società Italiana di Radiologia Medica (SIRM) since 2019
Ordine dei Medici Chirurghi e Odontoiatri di Milano (OMCeO)

Milano 5/12/2023

Carolina Lanza

Le linee programmatiche che intendo proporre per la sezione includono:

- Sviluppo di percorsi condivisi per la diagnosi e il follow-up dell'HCC;
- Promozione del ruolo della radiologia interventistica nel management integrato delle patologie gastroenterologiche;
- Iniziative di formazione e aggiornamento multidisciplinare, in sinergia con epatologi, gastroenterologi, oncologi e chirurghi nell'ambito gastroenterologico
- Incentivazione della ricerca applicata nel campo della radiologia e della radiologia interventistica gastroenterologica.

Sono convinta che l'interazione tra le diverse figure specialistiche rappresenti la chiave per un approccio moderno ed efficace alle complesse problematiche gastroenterologiche, e credo che la SIRM debba farsi promotrice di questa visione integrata.

Carolina Lanza