



Alessandra Zorz

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Work: Veneto Institute of Oncology IOV – IRCCS, via Gattamelata 64, Padua, (Italy)

WORK EXPERIENCE

Veneto Institute of Oncology IOV - IRCCS – Padova (PD), Italy

Address: Via Gattamelata 64, 35128 Padova (PD) (Italy)

Medical Physicist

[12/2015 – Current]

Medical Physics Specialist and Radiation Protection Expert in Nuclear Medicine with Highly Specialized Professional Role, Resonance Safety Expert, Quality and Clinical Risk Management Lead for the Medical Physics Department.

Associazione Amici del San Gerardo di Monza – ONLUS – Monza (MB)

Address: 20052 Monza (MB) | Name of unit or department: Via Donizetti 106

Physicist

[05/2011 – 07/2015]

Medical Physics Clinical Residency in the Medical Physics Department in San Gerardo University Hospital, Monza (Italy).

Università degli studi di Milano – Milano (MI)

Address: Via Celoria 16, 20133 Milano (MI)

Physicist

[05/2011 – 07/2015]

Clinical Fellowship for the Postgraduate Specialization in Medical Physics.

EDUCATION AND TRAINING

Professional Master in Biostatistics for Clinical Research and Scientific Publication

University of Padua [09/2020 – 09/2021]

Address: Via VIII Febbraio 2, 35122 Padua (Italy)

Radiation Protection Expert (II level)

Ministry of Labour and Social Policies [13/09/2015]

Postgraduate School in Medical Physics

University of Milan – Department of Physics [05/2011 – 07/2015]

Address: Via Giovanni Celoria 16, 20133 Milano (MI) | Final grade: 70/70 cum laude | Thesis: "Clear PEM: un tomografo dedicato alla Positron Emission Mammography"

Master of Science in Physics

University of Milano - Bicocca, Faculty of Mathematical, Physical and Natural Sciences [08/2008 – 11/2011]

Address: Piazza della Scienza 3, 20126 Milano (MI) | Field(s) of study: Biophysics and Medical Physics | Final grade: 110/110 cum laude | Thesis: "Utilizzo dell'imaging PET/TC nelle tecniche di radioterapia"

Bachelor of Science in Physics

University of Milano - Bicocca, Faculty of Mathematical, Physical and Natural Sciences [07/2005 – 09/2008]

Address: Piazza della Scienza 3 , 20126 Milano (MI) | Final grade: 110/110 cum laude | Thesis: "Sistemi digitali TOF-PET per applicazioni in linea durante i trattamenti di adroterapia"

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B1 READING C1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

TECHNICAL SKILLS

Technical skills

Throughout my professional career, I have developed extensive expertise as a Medical Physics Specialist, with a primary focus on managing Quality Assurance programs in the field of Nuclear Medicine. Since 2016, I have been deeply involved in the Quality Control of hybrid imaging systems (PET/CT and SPECT/CT), the assessment of Diagnostic Reference Levels, and the optimization of patient doses. Furthermore, I possess significant clinical experience in radiometabolic therapies involving ^{131}I , ^{177}Lu , ^{90}Y and ^{223}Ra .

In my capacity as a designated Radiation Protection Expert for two Nuclear Medicine operational units since 2016, I have gained substantial proficiency in managing radioactive sources and waste, evaluating occupational doses, and performing preliminary risk assessments for the implementation of new clinical practices. My role has also extended to hospital governance, having served as a technical member on various procurement boards and tender committees for the acquisition of advanced medical equipment.

My commitment to institutional quality and safety is reflected in several key appointments: since 2018, I have served as the Training Coordinator for the Medical Physics Department and as a member of the CME (Continuing Medical Education) committee at the Istituto Oncologico Veneto IOV-IRCCS. I have been the appointed Quality Lead for the Medical Physics Unit since 2019 and the Clinical Risk Manager since 2020. Additionally, between 2019 and 2022, I held the position of Quality Lead for the Imaging and Medical Physics Department. This extensive trajectory has allowed me to refine my process analysis and risk assessment skills, always aimed at optimizing workflows and ensuring the highest safety standards for both staff and patients.

At the international and national level, I have been a collaborator with the European Radiation Dosimetry Group (EURADOS) Working Group since 2018, focusing on safety within Nuclear Medicine. Between 2020 and 2021, I contributed to the European Federation of Organisations for Medical Physics (EFOMP) working group tasked with drafting guidelines for PET imaging quality assurance. My leadership roles include serving as a Board Member for the "AIFM Giovani" (Italian Association of Medical Physics) from 2021 to 2023. Currently, since March 2024, I am a member of the study group coordinated by the Italian National Institute of Health (ISS) dedicated to quality assurance in Nuclear Medicine.

SKILLS

Microsoft Office / R statistic / C/C++ (base level)

PUBLICATIONS

Scientific Publications (2025)

- Cecchin D, **Zorz A**, Lhommel R, Flaus A, Tylski P, Mathoux G, Hartman N, Guedj E, Serani F, Imbert L, Verger A. An European consensus on [^{123}I]Ioflupane acquisition and reconstruction using 3D CZT SPECT/CT. *EJNMMI Phys.* 2025 Dec 28;13(1):11. doi: 10.1186/s40658-025-00830-8. PMID: 41456252; PMCID: PMC12855673.
- Zancopè N, De Monte F, Simeone E, Giannone A, Lombardi R, Mele A, **Zorz A**, Di Paola A, Causin F, Paiusco M. Validation of SSDE calculation in a modern CT scanner and correlation with effective dose. *Sci Rep.* 2025 Feb 19;15(1):6091. doi: 10.1038/s41598-025-90509-y. PMID: 39972032; PMCID: PMC11840047.

- **Zorz A**, Morzenti S, Bianchi C, Campanaro F, Monte F, Ponti E, Berti S, Erba PA, Guerra L, Poli GL. Diagnostic Reference Levels in nuclear medicine for Positron Emission Tomography examinations: First Italian multicenter data collection. *Phys Med.* 2025 May;133:104984. doi: 10.1016/j.ejmp.2025.104984. Epub 2025 Apr 23. PMID: 40273574.

Scientific Publications (2024)

- **Zorz A**, Rossato MA, Turco P, Colombo Gomez LM, Bettinelli A, De Monte F, Paiusco M, Zucchetta P, Cecchin D. Performance evaluation of the 3D-ring cadmium-zinc-telluride (CZT) StarGuide system according to the NEMA NU 1-2018 standard. *EJNMMI Phys.* 2024 Jul 25;11(1):69. doi: 10.1186/s40658-024-00671-x. PMID: 39052176; PMCID: PMC11272762.
- De Nardo L, Santi S, Dalla Pietà A, Ferro-Flores G, Azorín-Vega E, Nascimbene E, Barbieri V, **Zorz A**, Rosato A, Meléndez-Alafort L. Comparison of the dosimetry and cell survival effect of ^{177}Lu and ^{161}Tb somatostatin analog radiopharmaceuticals in cancer cell clusters and micrometastases. *EJNMMI Phys.* 2024 Nov 13;11(1):94. doi: 10.1186/s40658-024-00696-2. PMID: 39535653; PMCID: PMC11561253.

Scientific Publications (2023)

- Taci X, Poletto G, Trotti F, Gramegna F, **Zorz A**, Giraudo C, Venturini F, Seno F, Realdon N, Vettor R, Faoro S, Cecchin D. Minutes to hours after a nuclear event: available radiation poisoning antidotes and practical considerations on possible urgent approaches. *Eur J Nucl Med Mol Imaging.* 2023 Oct;50(12):3498-3505. doi: 10.1007/s00259-023-06305-1. PMID: 37367964; PMCID: PMC10547657.
- Marturano F, Guglielmo P, Bettinelli A, Zattoni F, Novara G, **Zorz A**, Sepulcri M, Gregjanin M, Paiusco M, Evangelista L. Role of radiomic analysis of ^{18}F fluoromethylcholine PET/CT in predicting biochemical recurrence in a cohort of intermediate and high risk prostate cancer patients at initial staging. *Eur Radiol.* 2023 Oct;33(10):7199-7208. doi: 10.1007/s00330-023-09642-9. Epub 2023 Apr 20. PMID: 37079030; PMCID: PMC10511374.
- **Zorz A**, Calderoni F, Castriconi R, di Franco F, Felisi M, Gallo P, Itta F, Longo M, Manco L, Milazzo O, Savini A, Cavedon C, Maffei N. The Italian young medical physicist scenario: Results from the young AIFM group survey. *Phys Med.* 2023 Aug;112:102633. doi: 10.1016/j.ejmp.2023.102633. Epub 2023 Jul 7. PMID: 37423002.
- Cunha L, Dabin J, Leide-Svegborn S, **Zorz A**, Kollaard R, Covens P. Extremity exposure of nuclear medicine workers: results from an EANM and EURADOS survey. *Q J Nucl Med Mol Imaging.* 2023 Mar;67(1):29-36. doi: 10.23736/S1824-4785.22.03504-X. Epub 2023 Jan 11. PMID: 36630081.
- McCann A, Cherbuin N, Covens P, Dabin J, Haruz-Waschitz S, Gallo L, Datz H, Wierts R, Wrzesien M, **Zorz A**, Cooke J, Dowling A, Kollaard R. Finger doses due to ^{68}Ga -labelled pharmaceuticals in PET departments-results of a multi-centre pilot study. *J Radiol Prot.* 2023 Feb 1;43(1). doi: 10.1088/1361-6498/acb263. PMID: 36633569.
- **Zorz A**, D'Alessio A, Guida F, Ramadan RM, Richetta E, Cuppari L, Pellerito R, Sacchetti GM, Brambilla M, Paiusco M, Stasi M, Matheoud R. Impact of patient's habitus on image quality and quantitative metrics in ^{18}F -FDG PET/CT images. *Phys Med.* 2023 May;109:102584. doi: 10.1016/j.ejmp.2023.102584. Epub 2023 Apr 14. PMID: 37060633.
- Matheoud R, Boellaard R, Pike L, Ptacek J, Reynés-Llompарт G, Soret M, Vandenberghe S, **Zorz A**, Julyan P, Rausch I, Sattler B, Manuel SG, Tosi G, Dalianis K, Almeida PMD, Fabbri C, Gawel J, Hadjitheodorou P, Kotzarsalidou M, Viana Miranda Lima T, O'Doherty J, Skovorodko K, Sutov D, Taher A, Valenti M, Vanzi E. EFOMP's protocol quality controls in PET/CT and PET/MR. *Phys Med.* 2023 Jan;105:102506. doi: 10.1016/j.ejmp.2022.11.010. Epub 2022 Dec 18. PMID: 36538846.

Scientific Publications (2022)

- Dusi F, Guida F, Garcia ENV, Rossato MA, Germani A, Sapignoli S, Scaggion A, Scott A, **Zorz A**, Paiusco M. Fetal dose estimation for Virtual Tangential-fields Arc Therapy whole breast irradiation by optically stimulated luminescence dosimeters. *Phys Med.* 2022 Sep;101:44-49. doi: 10.1016/j.ejmp.2022.07.007. Epub 2022 Aug 6. PMID: 35944444.
- Sapignoli S, Roggio A, Boschini A, Guida F, Merlo C, Paiusco M, **Zorz A**, De Monte F. Size-specific dose estimates for pediatric head CT protocols based on the AAPM report TG-293. *Phys Med.* 2022 Aug;100:26-30. doi: 10.1016/j.ejmp.2022.06.004. Epub 2022 Jun 17. PMID: 35717776.

- Reynés-Llompart G, **Zorz A**, Boellaard R, Ptáček J, Pike L, Soret M, Vandenberghe S, Matheoud R. Quality control in PET/CT and PET/MRI: Results of a survey amongst European countries. *Phys Med*. 2022 Jul;99:16-21. doi: 10.1016/j.ejmp.2022.05.004. Epub 2022 May 20. PMID: 35598481.

Scientific Publications (2021)

- Kollaard R, **Zorz A**, Dabin J, Covens P, Cooke J, Crabbé M, Cunha L, Dowling A, Ginjaume M, McNamara L. Review of extremity dosimetry in nuclear medicine. *J Radiol Prot*. 2021 Dec 6;41(4). doi: 10.1088/1361-6498/ac31a2. PMID: 34670207.
- Sepulcri M, Fusella M, Cuppari L, **Zorz A**, Paiusco M, Evangelista L. Value of 18F-fluorocholine PET/CT in predicting response to radical radiotherapy in patients with localized prostate cancer. *Clin Transl Radiat Oncol*. 2021 Jul 27;30:71-77. doi: 10.1016/j.ctro.2021.07.002. PMID: 34409175; PMCID: PMC8361027.
- Asti M, D'Ambrosio L, Di Iorio V, Ferrari M, Filice A, Gorgoni G, Maccauro M, Pettinato C, Stasi M, **Zorz A**. Methods for preparation and administration of lutetium-177 oxodotreotide 3.7 GBq: proceedings from an Italian advisory board. *Clin Transl Imaging* 9, 277–280 (2021). <https://doi.org/10.1007/s40336-021-00431-2>.

Scientific Publications (2019)

- **Zorz A**, Matheoud R, Richetta E, Baichoo S, Poli M, Scaggion A, Pellerito RE, Cuppari L, Sacchetti GM, Stasi M, Paiusco M, Brambilla M. Performance evaluation of a new time of flight PET/CT scanner: Results of a multicenter study. *Phys Med*. 2019 Dec;68:146-154. doi: 10.1016/j.ejmp.2019.11.017. Epub 2019 Nov 28. PMID: 31786482.
- Carpanese D, **Zorz A**, Evangelista L, Salvatore N. Targeting prostate cancer with the anti-PSMA scFvD2B: a theranostic promise for nuclear medicine. *Clin Transl Imaging* 7, 295–301 (2019). <https://doi.org/10.1007/s40336-019-00337-0>.
- Branchini M, **Zorz A**, Zucchetta P, Bettinelli A, De Monte F, Cecchin D, Paiusco M. Impact of acquisition count statistics reduction and SUV discretization on PET radiomic features in pediatric 18F-FDG-PET/MRI examinations. *Phys Med*. 2019 Mar;59:117-126. doi: 10.1016/j.ejmp.2019.03.005. Epub 2019 Mar 16. PMID: 30928060.
- Zucchetta P, Branchini M, **Zorz A**, Bodanza V, Cecchin D, Paiusco M, Bui F. Quantitative analysis of image metrics for reduced and standard dose pediatric 18F-FDG PET/MRI examinations. *Br J Radiol*. 2019 Mar;92(1095):20180438. doi: 10.1259/bjr.20180438. Epub 2019 Jan 23. PMID: 30673306; PMCID: PMC6541180.
- Evangelista L, Cuppari L, Burei M, **Zorz A**, Caumo F. Head-to-head comparison between 18F-FDG PET/CT and PET/MRI in breast cancer. *Clin Transl Imaging* 7, 99–104 (2019). <https://doi.org/10.1007/s40336-019-00319-2>.
- Meléndez-Alafort L, Ferro-Flores G, De Nardo L, Bello M, Paiusco M, Negri A, **Zorz A**, Uzunov N, Esposito J, Rosato A. Internal radiation dose assessment of radiopharmaceuticals prepared with cyclotron-produced 99m Tc. *Med Phys*. 2019 Mar;46(3):1437-1446. doi: 10.1002/mp.13393. Epub 2019 Feb 8. PMID: 30661241.

CONFERENCES AND SEMINARS

[10/06/2023] Florence

11th Italian Association of Medical Physics (AIFM) National Congress Invited Speaker - Lecture title: "Detectors in Nuclear Medicine and Total-Body PET: State-of-the-Art and Technological Innovation"

[19/05/2023]

Webinar of the Italian Association of Radiation Oncology (AIRO) on Radioligand Therapy Invited Speaker - Lecture title: "Radioactive Isotopes in Therapy and Radiation Protection Regulations"

[09/12/2020]

ESMIT Online Course "Advanced Hybrid Imaging Techniques Including Therapy in Paediatric Patients (Children and Young Adults)" Invited Speaker - Lecture title "Equipment refresher: SPECT/CT, PET/CT and PET/MR"

[10/04/2014 – 13/04/2014] Rimini

XIV Italian Association of Nuclear Medicine (AIMN) Congress Invited Speaker - Lecture title: "The State-of-the-Art of Digital PET/CT Systems"

TEACHING ACTIVITIES

[2019 – Current]

Postgraduate School of Medical Physics – University of Padua

Adjunct Professor - Course: "Nuclear Medicine Instrumentation and Equipment"

[2019 – 2024]

Postgraduate School of Nuclear Medicine - University of Padua

Adjunct Professor - Course: "Diagnostic Imaging and Radiotherapy: Radiological and Nuclear Medicine Instrumentation"

[2023 – 2024]

Postgraduate School of Medical Physics – University of Rome "Tor Vergata"

Adjunct Professor - Course: "Nuclear Medicine Instrumentation and Radiation Protection Aspects"

[2016 – 2024]

Veneto Institute of Oncology IOV - IRCCS

Lead Instructor for the Institutional Training Programs for the Radiation Protection Course for Workers Exposed to Ionising Radiation and Radiation Protection of the Patient Course.

[03/2024]

Provincial Command of the Padua Fire Department

Lecturer in Radiometry for the NBCR Unit (Nuclear, Biological, Chemical, and Radiological) National Firefighters Corps – Provincial Command of Padua

NETWORKS AND MEMBERSHIPS

Membership in Scientific Societies:

- AIFM – Italian Association of Medical Physics
- INFN – National Institute for Nuclear Physics

Member of the Inter-provincial Order of Chemists and Physicists of Padua - Registration No. 1157A

I hereby authorize the processing of my personal data contained in this curriculum vitae in accordance with the GDPR (EU Regulation 2016/679) and the Italian Legislative Decree 196/2003 for the purposes of recruitment and selection.

Alessandra Zorz

Padua, 13/02/2026

Alessandra Zorz