



Alessandra Zorz

Nationality: Italian

Phone: (+39) 0498212965

Date of birth: 30/06/1986

Email address: alessandra.zorz@iov.veneto.it

LinkedIn : <https://it.linkedin.com/in/alessandra-zorz>

Orcid : <https://orcid.org/0000-0001-5650->

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

WORK EXPERIENCE

Medical Physicist

Veneto Institute of Oncology IOV - IRCCS [01/2016 – Current]

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

Medical physics Expert and Radiation Protection Expert for the Nuclear Medicine Department, Resonance Safety Expert, ISO quality referent.

Physicist

Associazione Amici del San Gerardo di Monza – ONLUS [06/2011 – 07/2015]

Address: 20052 Monza (MB)

Name of unit or department: Via Donizetti 106 - **Business or sector:**

Practical training for the Medical Physics School at the Medical Physics Department in A.O. San Gerardo of Monza.

Physicist

Università degli studi di Milano [06/2011 – 07/2015]

Address: Via Celoria 16, 20133 Milano (MI)

Fellowship for the school in Medical Physics.

EDUCATION AND TRAINING

Radiation Protection Expert (II level)

Ministero del Lavoro e delle politiche sociali [14/09/2015]

School of Medical Physics

Università degli Studi di Milano - Physics Department [06/2011 – 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 degree in Physics

Università degli Studi di Milano Bicocca - Mathematical, Physics and Natural Science Faculty [09/2008 – 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 degree in Physics

Università degli studi di Milano Bicocca - Mathematical, Physics and Natural Science Faculty [08/2005 – 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"

Scientific high school Diploma

Liceo Scientifico V. Bachelet [09/2000 – 07/2005]

Address: Via Vittorio Bachelet 6 , 23848 Oggiono (LC)

Field(s) of study: Sperimental adress PNI (informatic national plan)

LANGUAGE SKILLS

Mother tongue(s):

Italian

Other language(s):

English

LISTENING B1 READING C1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

TECHNICAL SKILLS

Technical skills

Excellent experience in Nuclear Medicine quality control on PET, SPECT, dose calibrator, probe and TC. Good experience in acquisition protocol management (especially 4D protocol) and in patient dose optimization. Good experience in radiation protection aspects of Nuclear Medicine Department, in particular in dose evaluation and radioactive source/waste management. Experience in nuclear medicine therapy with ¹³¹I, ¹⁷⁷Lu, ⁹⁰Y and ²²³Ra.

DIGITAL SKILLS

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

COMMUNICATION AND INTERPERSONAL SKILLS

Relational skills

Good communication and relational skills; experience in collaboration with research groups (Crystal Clear Collaboration – CERN, INFN, EURADOS, EFOMP). Good experience in multidisciplinary teams works.

PUBLICATIONS

Scientific articles

- **Zorz A**, Matheoud R, Richetta E et al., "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.
- Fusella M, Scaggion A, Pivato N, Rossato MA, **Zorz A**, Paiusco M. Efficiently train and validate a RapidPlan model through APQM scoring. *Med Phys*. 2018 Jun;45(6):2611-2619. doi: 10.1002/mp.12896. Epub 2018 Apr 19.
- Branchini M, **Zorz A**, Zucchetta P et al., 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.
- 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.
- Zucchetta P, Branchini M, **Zorz A** et al., 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.
- Evangelista L, **Zorz A**. Re: Response Assessment of 223Ra Treatment: Should a Fluorocholine PET/CT Be Performed? *Clin Nucl Med*. 2018 Nov;43(11):867-868. doi: 10.1097/RLU.0000000000002249.
- Pacilio M, Cassano B, Pellegrini R, Di Castro E, **Zorz A** et al. Gamma camera calibrations for the Italian multicentre study for lesion dosimetry in 223Ra therapy of bone metastases. *Phys Med*. 2017 Sep;41:117-123. doi: 10.1016/j.ejmp.2017.04.019. Epub 2017 Apr 28.
- Guerra L, Meregalli S, **Zorz A** et al., Comparative evaluation of CT-based and respiratory-gated PET/CT-based planning target volume (PTV) in the definition of radiation treatment planning in lung cancer: preliminary results. *Eur J Nucl Med Mol Imaging*. 2014 Apr;41(4):702-10. doi: 10.1007/s00259-013-2594-5. Epub 2013 Nov 1.

Chapter of books

- "The Bone Pathway: 223Ra-Dichloride", Radiopharmaceuticals, A Guide to PET/CT and PET/MRI Editors: F. Calabria, O. Schillaci, Springer Edition, DOI: <https://doi.org/10.1007/978-3-030-27779-6>.
- "Standard Operating Procedures for Quality Control of PET/CT and PET/MR Tomographs", Nuclear Medicine Textbook, Methodology and Clinical Applications, Editors: D. Volterrani, P.A. Erba, I. Carrio, H.W. Strauss, G. Mariani, Springer International Publishing, DOI: 10.1007/978-3-319-95564-3.

CONFERENCES AND SEMINARS

XIV Congresso Nazionale dell'Associazione Italiana di Medicina Nucleare

[Rimini, 11/04/2014 – 14/04/2014]

Lecture title: "Lo stato dell'arte dei sistemi PET/TC digitali"

Society of Nuclear Medicine and Molecular Imaging (SNMMI) 2018 Annual Meeting

[Philadelphia, 23/06/2018 – 26/06/2018]

Lecture title: "How to evaluate the Robustness of the RT Treatment Preparation Workflow in Prostate Cancer: the help of the Physicist"

2°congresso nazionale Associazione Italiana dei Tecnici in Risonanza Magnetica (AITIRM)

[Riccione, 21/05/2018 – 22/05/2018]

Lecture title: "PET/RM"

Fisica Medica e Medicina Nucleare: presente e futuro

[Genova, 05/05/2017]

Lecture title: "PET/MR, il punto di vista del fisico medico"

Corso base di Fisica in Medicina Nucleare (AIFM)

[Milan, 27/04/2017 – 28/04/2017]

Lecture title: "Tomografi PET/MRI"

Istituto Oncologico Veneto

[Padua, 2016 – 2020]

Radiation protection course for workers exposed to ionizing radiation.

TEACHING ACTIVITIES

School of Medical Physics

[2020 – Current]

Teacher for the course "Apparecchiature di Medicina Nucleare", Università di Padova.

School of Nuclear Medicine

[2020 – Current]

Teacher for the courses "Imaging diagnostico e radioterapia: strumentazione radiologica e di medicina nucleare" and "Radioprotezione", Università di Padova.

NETWORKS AND MEMBERSHIPS

Member of the scientific associations:

- Associazione Italiana di Fisica Medica (AIFM)
- Istituto Nazionale di Fisica Nucleare (INFN)

Other collaborations:

- Member of an EFOMP working group on PET/CT and PET/MR QC guidelines
- Research collaboration with EURADOS
- Research collaboration with INFN