

# **Camilla Satragno**

Date of birth: 8 Apr 1990 | Nationality: Italia

#### WORK EXPERIENCE

1 NOV 2021 - CURRENT Genoa, Italy

PHD IN BIOTECHNOLOGY IN TRANSLATIONAL MEDICINE, BIOIMAGING CURRICULUM DEPARTMENT OF EXPERIMENTAL MEDICINE (DIMES) AND GUSTAVE ROUSSY U1030

Field of study: Medical diagnostic and treatment technology

**Thesis**: Advanced Synergy between Perfusion Imaging, AI and Oncology: Towards Personalised Management of Radiotherapy Treatments in Glioblastoma

#### Main subject / occupational skills covered:

As of January 23, 2023, I am continuing my PhD research at Inserm, Gustave Roussy, Université Paris Saclay, Radiothérapie Moléculaire et Innovations thérapeutiques, U1030, Villejuif, France, until the completion of my PhD.

Research Methodology and Communication Skills:

- Structuring an abstract for congresses, posters, and oral presentations.
- Crafting presentations for congresses and student lectures.
- Participating in grant applications, from initial preparation to submission.

Scientific Focus in Neuro-Oncology:

- In-depth research on glial tumors in adults and late outcomes in patients undergoing cerebral radiotherapy in both pediatric and adult populations.
- Participating in specialized congresses and webinars to deepen knowledge in neuro-oncology.

Artificial Intelligence and Data Management:

- Designing a machine learning project workflow.
- Fundamentals of machine learning and radiomics in MRI imaging.
- Basic programming and editing skills focused on Python.
- Data management using RedCap platforms for data collection and analysis

#### EDUCATION AND TRAINING

29 DEC 2017 - 29 DEC 2021 Genoa, Italy

**RESIDENT IN RADIATION ONCOLOGY** Universirà degli Studi di Genova, Department of Health Sciences (DISSAL)

# Acquired skills

Main RT skills: Pediatric Oncology and Neuro-Oncology

Other RT skills: treatment of tumors in the male and female pelvic regions, specifically using gynecological brachytherapy, breast cancer, sarcomas, and palliative care treatments.

#### Advanced Imaging Techniques:

Enhanced knowledge of imaging techniques crucial for radiotherapy, particularly brain MRI and PET scans using various tracers.

Pediatric Neuro-Oncology Clinical Experience:

- Spent one day a week for two years at the pediatric hospital's unit for pediatric neuro-oncology, gaining insights into surgical planning, immediate postoperative care, and the neuro-oncological treatment journey from diagnosis to therapy.
- Focused on acute and late side effects post-treatment, emphasizing late effects like quality of life and neurocognitive outcomes.
- Followed neuro-oncological children in their palliative care journey through to end-of-life care.

Representation and Leadership:

- Represented radiotherapy colleagues on the Radiotherapy Specialist School Council.
- Represented all residents in the School Council of Medical and Pharmaceutical Sciences and in the Regional Observatory of Specialization Schools (Liguria Region).
- Developed medical-legal knowledge, leadership, and management skills, and learned to liaise with political entities.

Website https://dissal.unige.it/ Field of studyMedical diagnostic and treatment technology Final grade50/50 Cum Laude

ThesisPermanent alopecia in pediatric patients with medulloblastoma treated by craniospinal irradiation: looking for a threshold dose

1 MAY 2021 - 31 AUG 2021 Villejuif, France

MEDICAL OBSERVER IN PAEDIATRIC RADIOTHERAPY Département de Radiothérapie, Gustave Roussy

1 NOV 2011 - 21 JUN 2021 Genoa, Italy

**DEGREE IN MEDICINE** University of Medicine and Surgery, Università degli Studi di Genova (UNIGE)

Website https://unige.it/ Final grade110/110 Cum Laude

Thesis Vein of Galen aneurysmal malformation: Giannina Gaslini Hospital experience

1 JUL 2015 - 15 JUL 2015 Plzen, Czechia

SUMMER SCHOOL OF SURGERY University of Plzen

1 JAN 2015 - 30 JUN 2015 Plzen, Czechia

**ERASMUS** UNIGE and University of Plzen

10 MAR 2024 - 14 MAR 2024 Barcelona, Spain

ESTRO 2024 PARTICLE THERAPY The European Society for Radiotherapy and Oncology (ESTRO)

The course provided us with a detailed overview of the clinical rationale and indications for particle therapy and the state of the supporting medical evidence, including the status of clinical trials.

It made the distinctive features of particle therapy as compared to other radiotherapy modalities understandable Deepened our understanding of the physical, biological, and technical aspects of implementing particle therapy in clinical practice

Gave us an in-depth description of particle treatment systems, dosimetry, treatment delivery, and treatment planning and illustrated the latest technological developments in particle therapy

We were able to share the challenges of particle center projects in different healthcare environments.

Website https://www.estro.org/Courses/2024/Particle-Therapy

29 JAN 2024 - 31 JAN 2024

ESTRO 2024 ADVANCED IMAGING IN RADIOTHERAPY: CURRENT USE, FUTURE DEVELOPMENTS, AND THE INTEGRATION OF AI The European Society for Radiotherapy and Oncology (ESTRO)

Online course.

We have:

- improved understanding of the basic principles of MRI, PET and CT imaging;
- reviewed current guidelines and best practices on the use of imaging hardware and image processing software;
- learned about advanced imaging applications such as 4D CT (CB), multi-parametric MRI and PET;
- explored the future of imaging in radiotherapy by highlighting the latest research developments.

Website https://www.estro.org/Courses/2024/Advanced-Imaging-in-Radiotherapy-Current-use,-Futu

18 MAR 2024 - 21 MAR 2024 Villejuif

MASTERCLASS: ARTIFICIAL INTELLIGENCE IN MEDICAL PHYSICS & RADIATION ONCOLOGY Gustave Roussy

- Introduced AI Vocabulary and Basic Concepts.
- Identified Potential Applications of AI in Medical Physics: Explored potential uses of AI within medical imaging and radiotherapy, enabling to recognize opportunities for innovation in these fields.

- Understood Mathematical Basis of Key Algorithms: Gained a solid understanding of the mathematical fundamentals underpinning machine learning and deep learning algorithms, providing a strong theoretical foundation.
- Enhanced Skills in Practical Sessions: Strengthened practical skills through hands-on sessions involving computerbased applications of AI tools, ensuring the practical use of these methodologies.ext

 $\label{lem:website} \textbf{Website} \ \ \textbf{https://gustaveroussy.my.site.com/formation/s/formation-academique/a0Y0900000Ftwg0EAB/artificial-intelligence-in-medical-physics-radiation-oncology2024application?language=fr$ 

1 SEP 2021 - 24 NOV 2023 Villejuif, France

**DIPLÔME INTER-UNIVERSITAIRE D'ONCOLOGIE PÉDIATRIQUE (DIUOP)** Gustave Roussy and Université Paris Saclay

I acquired the basics of treating children and adolescents with malignant diseases within a multidisciplinary paediatric oncology practice.

I attended the radiotherapy oncology department of the Gustave Roussy for 7 months, under the supervision of the paediatric oncology team, participating in full clinical and multidisciplinary activities.

Website <a href="https://www.gustaveroussy.fr/fr/formation">https://www.gustaveroussy.fr/fr/formation</a>

ThesisCognitive development at one year after craniospinal irradiation in children treated for medulloblastoma

4 JUN 2023 - 6 JUN 2023 Berlin, Germany

EUROPEAN COMBINED NEURONCOLOGY COURSE, 2ND CYCLE, YEAR 2 SIOPE Training and education BTG

Website https://siope.eu/european-research-and-standards/clinical-research-council/siopecrc/european-clinical-study-gr-2852/

15 FEB 2023 - 15 FEB 2023

INTRODUCTION TO MEDICAL STATISTICS GIMBE Foundation online course

Website https://www.gimbe.org/

27 SEP 2022 - 27 SEP 2022

HOW TO WRITE A SCIENTIFIC ARTICLE IN ENGLISH GIMBE Foundation online course

Website www.gimbe.org

28 APR 2022 - 28 APR 2022

HOW TO WRITE A SCIENTIFIC ARTICLE GIMBE Foundation online course

Website www.gimbe.org

29 NOV 2021 - 29 NOV 2021

THE CLINICAL RESEARCH PROTOCOL: FROM QUESTIONING TO DRAFTING. GIMBE Foundation online course

Website https://www.gimbe.org/

20 SEP 2021 - 22 SEP 2021 Paris, France

1ST INTERNATIONAL PROTONTHERAPY COURSE ON PEDIATRIC CNS TUMORS Institute Curie

Website https://training.institut-curie.org/PedCNS2021

26 JAN 2021 - 26 JAN 2021

NEURO-ONCOLOGY: MULTIDISCIPLINARY MANAGEMENT OF ADULT BRAIN TUMOUR ESO online course

20 FEB 2019 - 6 APR 2019 Negrar, Italy

THE METHODOLOGY OF CLINICAL TRIALS IRCCS Hospital Sacro Cuore Don Calabria

The course was structured in several modules, I attended the following:

• "The methodology of clinical trials: Part 4 systematic reviews and meta-analysis." Worshop, Negrar, Italy, April 6, 2019

- "The methodology of clinical trials: Part 2 advanced training." Worshop, Negrar, Italy, March 9, 2019
- "The methodology of clinical trials: Part 1 the basis." Worshop, Negrar, Italy, February 20, 21, 2019

Website https://www.sacrocuore.it/

#### NETWORKS & MEMBERSHIPS

10 JUN 2023 - CURRENT

European Society for Paediatric Oncology (SIOPE), Brain Tumour Group (BTG), Training and Education group

As an co-organizer of the SIOPE Brain Tumour Group's European Combined Pediatric Neuro-Oncology Course, I contribute to Europe's first and only educational program focused on comprehensive, multidisciplinary care for children with CNS tumors. The program includes a three-year module agenda covering basic science, clinical dilemmas, and patient care aspects like quality of life and long-term survival. I help ensure trainees receive a thorough neuro-oncology curriculum through scientific sessions, workshops, and clinical case presentations

Link https://siope.eu/european-research-and-standards/clinical-research-council/siopecrc/european-clinical-study-gr-2852/

10 JUN 2023 - CURRENT

Young Investigators and Innovators (YII) Group SIOPe BTG

As Chair of the Young Investigators and Innovators (YII) Group at SIOPe BTG, I lead initiatives to foster collaboration and mentorship among early-career researchers. My role includes organizing educational course and coordinating research efforts aimed at advancing pediatric neuro-oncology.

Link https://siope.eu/european-research-and-standards/clinical-research-council/siopecrc/european-clinical-study-gr-2852/

#### INVITED TALKS AND PRESENTATIONS

20 NOV 2024 - 22 NOV 2024

Invited Chair European Combined Neuroncology Course SIOPe BTG

Lisbon, Portugal

Chair of the 'Clinical Case Discussion' session of the European Combined Neuroncology Course SIOPe BTG

5 JUL 2024 - 6 JUL 2024

# **Invited Speaker Aiom National Congress for Young**

Florence Italy

Speaker at the Conference entitled "Oncology 2024: Right and Wrong - Aiom National Congress for Young People", as part of the Session entitled "SPECIAL SESSION: RARE TUMORS".

29 SEP 2023 - 29 SEP 2023

**Invited Speaker AIRO webinar** 

Distance Learning (webinar) on Pediatric Radiotherapy: Focus on Palliation, organized by AIRO and Associazione italiana di ematologia e oncologia pediatrica (AIEOP)

# HONOURS AND AWARDS

28 OCT 2023

The best scientific abstract of the 33th National AIRO Congress – Elekta

"PERMANENT ALOPECIA AFTER CRANIOSPINAL IRRADIATION IN SURVIVORS OF PEDIATRIC BRAIN TUMORS: A MULTIFACTORIAL ANALYSIS"

#### PUBLICATIONS

2023

The prognostic value of FIGO staging defined by combining MRI and [18F]FDG PET/CT in patients with locally advanced cervical cancer

doi: 10.1016/j.currproblcancer.2023.101007. Epub 2023 Sep 5. PMID: 37684197.

Raffa S, Lanfranchi F, Satragno C, et al. Curr Probl Cancer. 2023 Dec;47(6):101007.

2023

# <u>Post-operative flank irradiation using conformal versus highly conformal radiotherapy techniques</u> for paediatric renal tumours: Results from the French registry PediaRT

Authors: Le Quellenec G, Bernier-Chastagner V, Sellami N, Helfre S, Satragno C, Leseur J, Escande A, Jolnerovski M, Noel G, Missohou F, Claude L, Cantaloube M, Laprie A, Huchet A, Scouarnec C, Guimard G, Muracciole X, Paul J, Supiot S, Jouglar E; Groupe Français de Radiothérapie Pédiatrique.

doi: 10.1002/pbc.30627. Epub 2023 Aug 14. PMID: 37580901.

Le Quellenec G et al. Pediatr Blood Cancer. 2023 Nov;70(11):e30627.

2023

### Technological advancements and future perspectives in breast cancer radiation therapy

Fozza A, De Rose F, De Santis MC, Meattini I, Meduri B, D'angelo E, Dei D, Figlia V, La Rocca E, Fregatti P, Satragno C, Belgioia L, Giaj-Levra N.

doi: 10.1080/14737140.2023.2195167. Epub 2023 Mar 28. PMID: 36960754.

Fozza A, De Rose F, De Santis MC et al. Expert Rev Anticancer Ther. 2023 Apr;23(4):407-419.

2023

# <u>Oligometastatic Prostate Cancer Treated with Metastasis-Directed Therapy Guided by Positron</u> Emission Tomography: Does the Tracer Matter?

Lanfranchi F, Belgioia L, Marcenaro M, Zanardi E, Timon G, Riondato M, Giasotto V, Zawaideh JP, Tomasello L, Mantica G, Piol N, Borghesi M, Traverso P, Satragno C, Panarello D, Scaffidi C, Romagnoli A, Rebuzzi SE, Coco A, Spina B, Morbelli S, Sambuceti G, Terrone C, Barra S, Fornarini G, Bauckneht M.

doi: 10.3390/cancers15010323. PMID: 36612319; PMCID: PMC9818332.

Lanfranchi F, Belgioia L, Marcenaro M et al. Cancers (Basel). 2023 Jan 3;15(1):323

2022

# <u>High dose craniospinal irradiation as independent risk factor of permanent alopecia in childhood</u> medulloblastoma survivors: cohort study and literature review.

Satragno C, Verrico A, Giannelli F, Ferrero A, Campora S, Turazzi M, Cavagnetto F, Schiavetti I, Garrè ML, Garibotto F, Milanaccio C, Piccolo G, Crocco M, Ramaglia A, Di Profio S, Barra S, Belgioia L.

doi: 10.1007/s11060-022-04186-2. Epub 2022 Nov 12. PMID: 36369416; PMCID: PMC9758075.

Satragno C et al. J Neurooncol. 2022 Dec;160(3):659-668.

2020

### Multiple systemic treatment options in a patient with malignant tenosynovial giant cell tumour.

Rebuzzi SE, Grassi M, Catalano F, Buscaglia M, Bertulli R, Satragno C, Belgioia L, Comandini D.

doi: 10.1097/CAD.000000000000844. PMID: 31567307; PMCID: PMC6903349.

Rebuzzi SE et al. Anticancer Drugs. 2020 Jan;31(1):80-84.

2019

# Radiation-Induced Moyamoya Syndrome in Children with Brain Tumors: Case Series and Literature Review.

Scala M, Fiaschi P, Cama A, Consales A, Piatelli G, Giannelli F, Barra S, Satragno C, Pacetti M, Secci F, Tortora D, Garrè ML, Pavanello M.

doi: 10.1016/j.wneu.2019.11.155. Epub 2019 Dec 2. PMID: 31805403...

Scala M, et al. World Neurosurg. 2020 Mar;135:118-129.

# Endometrial Cancer Risk Factors, Management and Prognosis: Cancer Etiology, Diagnosis and Treatments

Participation in the drafting of two Appendix:

Appendix II Brachytherapy Technique in Endometrial Cancer:

Elena Tornari, Camilla Satragno, Flavio Giannelli, Liliana Belgioia and Renzo Corvò

Appendix III Role of Palliative Radiation Therapy in Endometrial Cancer:

Liliana Belgioia, Camilla Satragno and Renzo Corvò

ISBN: 978-1-53613-888-7 eBook

Published by Nova Science Publishers, Inc. † New York

Simone Ferrero

2024

Systemic Inflammatory Markers and Volume of enhancing tissue on post-contrast T1w MRI images in Differentiating True Tumor Progression from Pseudoprogression in High-Grade Glioma To be published in: Clinical and Translational Radiation Oncology

Camilla Satragno, Irene Schiavetti et al.

#### CONFERENCES & SEMINARS

13 MAY 2024 - 17 MAY 2024 Milan

SIOP Europe 2024, 5th Annual Meeting of the European Society for Paediatric Oncology

Participation in the radiotherapy working group

Link https://siopeurope.eu/

3 MAY 2024 - 7 MAY 2024 Glasgow

42nd ESTRO 2024 Radiation Oncology: Bridging the Care Gap

Poster discussion 1st author: session 'Haematology and Paediatrics'.

Abstract entitled "HOPE to be PAST: Hair loss outcome prediction in paediatric patients after craniospinal irradiation".

Link https://www.estro.org/Congresses/ESTRO-2024

27 OCT 2023 - 29 OCT 2023 Bologna

33rd AIRO 2023 Radioterapia Oncologica: l'evoluzione al servizio dei pazienti

Proffered Paper: "PERMANENT ALOPECIA AFTER CRANIOSPINAL IRRADIATION IN SURVIVORS OF PEDIATRIC BRAIN TUMORS: A MULTIFACTORIAL ANALYSIS"

Elekta Award for the best abstract, the best scientific paper of the congress.

Link https://www.radioterapiaitalia.it/evento/xxxiii-congresso-nazionale-airo-bologna-27-29-ottobre-2023/

1 OCT 2023 - 3 OCT 2023 San Diego

### **ASTRO 2023 Annual Meeting**

Poster 1st author: "An innovative approach to Scalp Segmentation in pediatric brain craniospinal radiotherapy: An atlas base study."

Link <a href="https://www.astro.org/meetings-and-education/micro-sites/2023/am-exhibitors">https://www.astro.org/meetings-and-education/micro-sites/2023/am-exhibitors</a>

21 SEP 2023 - 24 SEP 2023 Rotterdam

18th Meeting of the European Association of Neuro-Oncology (EANO 2023)

Poster 1st author: ABSTRACT CITATION ID: NOAD137.305 P11.71.B THE MULTIDISCIPLINARY METHOD TO DISTINGUISH TRUE TUMOUR PROGRESSION FROM PSEUDOPROGRESSION IN HIGH GRADE GLIOMA VIA THE SYSTEMIC INFLAMMATORY

#### Posters:

- ABSTRACT CITATION ID: NOAD137.257 P11.23.A GLIOBLASTOMA MOLECULAR CORRELATES OF SEIZURE OCCURRENCE/RECURRENCE AFTER SURGERY: THE ROLE OF P53 MUTATION
- ABSTRACT CITATION ID: NOAD137.313 P11.79.B MULTICENTRE MULTI-COMPONENT DATA COLLECTION TO DEFINE NEW PREDICTORS OF RELAPSE IN HIGH GRADE GLIOMA
- ABSTRACT CITATION ID: NOAD137.348 P13.14.A PREDICTION OF OVERALL SURVIVAL IN HIGH-GRADE GLIOMA USING MULTIPARAMETRIC MRI-BASED RADIOMICS. APPLICATION TO A MULTICENTER COHORT

Link https://www.eano.eu/eano2023/abstracts/

7 SEP 2023 - 8 SEP 2023 Berlin

#### **SIOPE BTG Annual Meeting 2023**

Link https://siop-btg-course.webnode.at/

16 MAR 2023 - 17 MAR 2023 Padua

## Paediatric Solid Tumours Conference AIEOP Associazione Italiana Ematologia Oncologia Pediatrica

Link https://www.aieop.org/web/iniziative/convegno-tumori-solidi-2023/

8 APR 2023 - 12 MAY 2023 Valencia

# SIOP Europe 2023, 4th Annual Meeting of the European Society for Paediatric Oncology

Participation in the radiotherapy working group

Link https://siope.eu/news/siop-europe-annual-meeting-2023/

15 OCT 2022 - 19 OCT 2022 Barcelona

#### EANM 22 European congress of The European society of Nuclear Medicine

Poster, co-author: "A combination of MRI and [18F]FDG-PET measures independently predicts the overall survival in patients with locally advanced cervical cancer (LACC) treated with chemoradiotherapy"

Selected as Top-rated oral presentation, Awarded as best poster category oncology 1

6 MAY 2022 - 10 MAY 2022 Copenhagen

#### 41st ESTRO 2022 Learning from Every Patient

Proffered paper 1st author: "High dose craniospinal irradiation as independent risk factor of permanent alopecia in childhood medulloblastoma survivors: a cohort study"

Link https://www.estro.org/ESTRO/media/ESTRO/Congresses/ESTRO 2022/220502-ESTRO-2022-Programme-Overview.pdf

15 SEP 2022 - 18 SEP 2022 Vienna

#### 17th Meeting of the European Association of Neuro-Oncology (EANO 2022)

Poster 1st author: Potential role of pre-radiotherapy MRI for target delineation in high-grade gliomas: a multicenter retro-prospective cohort study

Link https://www.eano.eu/eano2022/abstracts/

13 JUN 2022 - 15 JUN 2022 Hamburg

#### 20th International Symposium on Pediatric Neuro-Oncology (ISPNO 2022)

Poster 1st author: "Radiation-induced hypothyroidism in pediatric brain tumor survivors: radiation dose-volume predictors of its onset."

#### Poster co-author:

- "Long-term neurocognitive and psychosocial outcomes among Adolescents and Young Adults survivors of paediatric brain tumor"
- "Behavioral disturbances as underestimated presenting symptoms in children with diffuse ntrinsic pontine glioma (DIPG)"

Link https://academic.oup.com/neuro-oncology/article/24/Supplement 1/NP/6601559

# 31st Annual AIRO National Congress of Radiotherapy and Oncology

Proffered paper: "Hypofractionation in radiotherapy of high-grade glioma: a proposal for fragile patients."

Proffered paper co-author: "Pattern of failure in patients with cervical cancer treated with chemo-radiotherapy"

Link https://www.radioterapiaitalia.it/news/congresso-nazionale-airo-2021-relazioni-online-e-abstract-book/

9 DEC 2020 - 12 DEC 2020 online

30th Annual AIRO National Congress of Radiotherapy and Oncology, online course, Dicember 9-12, 2020

Poster 1st author: "Reducing high grade glioma contouring volumes do not increase treatment field marginal recurrence risk"

Poster co-author: "Low dose Total body irradiation using Tomotherapy: implementation of method for children patient"

Link https://www.radioterapiaitalia.it/evento/save-the-date-airo-2020/

27 SEP 2019 - 29 SEP 2019 Rimini

# 29th Annual AIRO National Congress of Radiotherapy and Oncology

Proffered paper co-author:

- "Radiotherapy in a Pleuro-pulmonary Blastoma occuring in a 2-year old male: a clinical case report"
- "Implementation of a method for heart irradiation: a case report of Interatrial Ewing's Sarcoma"
- "Pituitary deficits after radiotherapy in pediatric patients after long term fol- low-up"
- "Evidence for an improved therapeutic index with image guided adaptive radiotherapy plus brachytherapy in locally advanced Cervical Cancer"

Poster 1st author: "Radiation induced hypothyroidism in pediatric tumors of central nervous system: long term results of monoinsti- tutional experience"

26 APR 2019 - 30 APR 2019 Milan

# 38th ESTRO 2019 Targeting optimal care, together

Poster 1st author:

- "Development of pituitary deficits after radiotherapy in pediatric patients after long follow-up"
- "Radiation induced hypothyroidism in pediatric tumors of Central Nervous System"

 $\textbf{Link} \ \underline{\text{https://www.estro.org/ESTRO/media/ESTRO/Congresses/ESTRO38/ESTRO38-Programme-book-new.pdf}$ 

#### LANGUAGE SKILLS

Mother tongue(s): ITALIAN

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production Spoken interaction		
ENGLISH B2		C1	B2	B2	B2
FRENCH B2		B2	B2	B2	B2

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