



Fabrizio Mattei

Date of birth: 16 Feb 1968 | **Nationality:** Italian | **Phone number:** (+39) 0649906099 (Work) |

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Address: Istituto Superiore di Sanità, Viale Regina Elena, 299, 00161, Rome, Italy (Work)

WORK EXPERIENCE

RESEARCH FELLOW IN CLINICAL ONCOLOGY – "REGINA ELENA" NATIONAL CANCER INSTITUTE – 1996 – 1998 – ROME, ITALY

Business or Sector: Professional, scientific and technical activities | **Department:** Clinical Pathology Service | **Website:** www.ifo.it

- Clinical pathology research
- Molecular diagnostic tests
- Molecular Biology experiments
- Genetics

GRADUATE RESEARCH FELLOW (CONTRATTO A COLLABORAZIONE COORDINATA E CONTINUATIVA) – ISTITUTO SUPERIORE DI SANITÀ – 1998 – 2008 – ROME, ITALY

Business or Sector: Professional, scientific and technical activities | **Department:** Department of Hematology, Oncology and Molecular Medicine | **Email:** fabrizio.mattei@iss.it | **Website:** www.iss.it

- Immune cell biology
- Immune cell activation
- Molecular biology
- Genetics

RESEARCH SCIENTIST THE EDWARD JENNER INSTITUTE FOR VACCINE RESEARCH – 1999 – 2000 – COMPTON (NEWBURY), UNITED KINGDOM

Business or Sector: Professional, scientific and technical activities | **Department:** Immunological Memory Group (Director: Dr. David F. Tough) | **Website:** <https://www.jenner.ac.uk/>

- Dendritic cell biology
- T cell biology
- Dendritic cell activation
- Mouse models of study
- Recombinant DNA/RNA bioengineering

FULL TIME INVESTIGATOR, PERMANENT STAFF (RICERCATORE, III LIVELLO PROFESSIONALE) AND RESEARCH GROUP COORDINATOR – ISTITUTO SUPERIORE DI SANITÀ – 2008 – 2022 – ROME, ITALY

Business or Sector: Professional, scientific and technical activities | **Department:** Department of Oncology and Molecular Medicine | **Email:** fabrizio.mattei@iss.it | **Website:** <https://www.iss.it>

- Tumor immunology
- Tumor microenvironment dynamics
- Human & mouse models of study
- Organ-on-Chip technology
- Advanced in vitro models (organoids, spheroids)
- Immuno-oncology
- IL-33 roles in cancer
- eosinophils in tumor microenvironment
- basophils in tumor microenvironment

FULL TIME PRINCIPAL INVESTIGATOR AND RESEARCH GROUP COORDINATOR, PERMANENT STAFF (PRIMO RICERCATORE, II LIVELLO PROFESSIONALE) – ISTITUTO SUPERIORE DI SANITÀ – 2022 – Current – ROME, ITALY

Business or Sector: Professional, scientific and technical activities | **Department:** Department of Oncology and Molecular Medicine | **Email:** fabrizio.mattei@iss.it | **Website:** <https://www.iss.it>

- Tumor immunology
- Tumor microenvironment dynamics
- Human & mouse models of study
- Organ-on-Chip technology

- Advanced in vitro models (organoids, spheroids)
- Immuno-oncology
- IL-33 roles in cancer
- eosinophils in tumor microenvironment
- basophils in tumor microenvironment
- Scientific project coordination
- PhD student supervision
- Thesis student supervision

CO-FOUNDER OF THE "ORGAN-ON-CHIP ITALIAN SOCIETY" (SIOOC- "SOCIETÀ ITALIANA ORGAN-ON-CHIP") – NATIONAL RESEARCH COUNCIL – 2023 – Current – ROME, ITALY

Business or Sector: Information and communication | **Website:** <https://www.siooc.it>

- Coordination of the SIOoC activities
- Co-organization of SIOoC annual meetings
- Organization of SIOoC focused seminars
- Recruitment of young researchers in SIOoC

RESEARCH UNIT COORDINATOR, ROME TECHNOPOLE OPEN ISYONCHIPLAB (IMMUNE SYSTEM-ON-CHIP LABORATORY) – ISTITUTO SUPERIORE DI SANITÀ – 16 Oct 2024 – Current – ROME, ITALY

Business or Sector: Professional, scientific and technical activities | **Department:** Department of Oncology and Molecular Medicine | **Email:** fabrizio.mattei@iss.it | **Website:** <https://www.rometechnopole.it/servizi/laboratori-ricerca/>

Open Lab formed by groups of experts in the use of Organ-on-Chip technologies to improve the drug testing, drug repurposing and pre-clinical testing. The distinguishing feature of organ-on-chips is their ability to accurately recapitulate the organ or biological system under study so as to represent faithfully human physiopathology. It follows that the development of 'immune system-on chip' models is of great interest to the scientific, clinical and patient communities.

EDUCATION AND TRAINING

1 JAN 1988 – 1 JAN 1993 Rome, Italy

DEGREE IN BIOLOGICAL SCIENCES University of Rome "La Sapienza"; "Regina Elena" National Cancer Institute

- Molecular oncology, genetics;
- Clinical oncology; experimental;
- thesis on molecular biology.

Website www.uniroma1.it | **Field of study** Medicine , Medical diagnostic and treatment technology , Pharmacy **Final grade** 110 |

Level in EQF EQF level 7 |

Thesis Study of structural alterations of the oncogene cmyb in adenomatous lesions at risk of the colorectal tract: correlation with neoplastic lesions and with various clinical parameters of interest

1 JAN 1994 – 1 JAN 1997 Rome, Italy

SPECIALIZATION University of Rome "La Sapienza"; "Regina Elena" Cancer Institute

- Applied biotechnology

Website www.uniroma1.it | **Field of study** Medicine , Medical diagnostic and treatment technology , Pharmacy **Final grade** 70/70 cum laude |

Level in EQF EQF level 8 | **Thesis** Study of apoptosis and neoplastic progression in colorectal tumors

27 NOV 1995 – CURRENT Rome, Italy

QUALIFIED BIOLOGIST (ITALY) Federazione Nazionale degli Ordini dei Biologi

Website <https://www.fnob.it/>

7 MAR 2025 – CURRENT Rome, Italy

NATIONAL SCIENTIFIC QUALIFICATION ("ASN - ABILITAZIONE SCIENTIFICA NAZIONALE") AS ASSOCIATE PROFESSOR IN THE ITALIAN HIGHER EDUCATION (UNIVERSITY) SYSTEM - SECTOR 05/E2: MOLECULAR BIOLOGY Italian Ministry of University and Research (Ministero dell'Università e della Ricerca, MUR)

10 MAR 2025 – CURRENT Rome, Italy

NATIONAL SCIENTIFIC QUALIFICATION ("ASN - ABILITAZIONE SCIENTIFICA NAZIONALE") AS ASSOCIATE PROFESSOR IN THE ITALIAN HIGHER EDUCATION (UNIVERSITY) SYSTEM - SECTOR 06/A2: GENERAL PATHOLOGY AND CLINICAL PATHOLOGY Italian Ministry of University and Research (Ministero dell'Università e della Ricerca, MUR)

14 MAR 2025 – CURRENT Rome, Italy

NATIONAL SCIENTIFIC QUALIFICATION ("ASN - ABILITAZIONE SCIENTIFICA NAZIONALE") AS ASSOCIATE PROFESSOR IN THE ITALIAN HIGHER EDUCATION (UNIVERSITY) SYSTEM - SECTOR 06/D3: BLOOD DISEASES, ONCOLOGY AND RHEUMATOLOGY. Italian Ministry of University and Research (Ministero dell'Università e della Ricerca, MUR)

Website <https://www.mur.gov.it/it> **Level in EQF** EQF level 8 **National classification** 4

12 JUN 2026 – CURRENT Rome, Italy

NATIONAL SCIENTIFIC QUALIFICATION ("ASN - ABILITAZIONE SCIENTIFICA NAZIONALE") AS FULL PROFESSOR IN THE ITALIAN HIGHER EDUCATION (UNIVERSITY) SYSTEM - SECTOR 06/D3: BLOOD DISEASES, ONCOLOGY AND RHEUMATOLOGY. Italian Ministry of University and Research (Ministero dell'Università e della Ricerca, MUR)

Level in EQF EQF level 7

● NETWORKS AND MEMBERSHIPS

JAN 2022 – CURRENT Rome (Italy)

SIOoC - Italian Society for Organ-on-Chip/Società Italiana Organ-on-Chip.

- Candidate for the Board of Directors (2025-2027)
- co-Founder
- Ordinary member

Link <https://www.siooc.it>

3 MAY 2024 – CURRENT Amsterdam (The Netherlands)

EUROoCS - European Organ on Chip Society

- Ordinary memmber
- Candidate for the Inclusivity & Diversity Panel Working Group

Link <https://euroocs.eu/>

JAN 2023 – CURRENT Milan (Italy)

SIICA - Società Italiana di Immunologia, Immunologia Clinica e Allergologia

Ordinary member

Link <https://siica.it/>

1 MAY 2023 – CURRENT

EFIS - European Federation of Immunology Societies

Associate member

Link <https://www.efis.org/>

JAN 2024 – CURRENT Berlin (Germany)

IUIS - International Union of Immunology Societies

Associate member

Link <https://iuis.org/>

JAN 2015 – CURRENT Mainz (Germany)

CIMT - Association for Cancer Immunotherapy

Ordinary member

Link <https://www.cimt.eu/>

JAN 2015 – CURRENT Paris (France)

EATI - European Academy for Tumor Immunology

Ordinary member

Link <http://www.euroacadt.eu/>

JAN 2017 – JAN 2018 Naples (Italy)

AICC - Associazione Italiana Colture Cellulari/Italian Association for Cell Cultures

Ordinary member

Link <https://www.aicc.website/>

28 JUL 2022 – 27 JUL 2023 Turin (Italy)

B2xM - Bioinformatic Association for Molecular Medicine

Ordinary member

1 JAN 2014 – CURRENT Barcelona (Spain)

European Federation of Biotechnology

Membership of Dr. Fabrizio Mattei, as an Ordinary Member, to the international society "European Federation of Biotechnology" (EFB) as of January 1, 2014. Said society has as its primary mission the dissemination of technical and scientific information concerning the applications of biotechnology and bioengineering in various scientific contexts (Immunology, Cancer, Immuno-oncology, etc.).

Link <http://www.efbiotechnology.org/>

● **CONFERENCES AND SEMINARS**

27 NOV 2024 – 27 NOV 2024 Aula-Nitti Bovet h 9.00-12.00, Istituto Superiore di Sanità, Rome, Italy

Immunity and cancer: the point of view of Young Investigators

- Type of event: Conference
- Role: *Organizer, Scientific coordinator, Moderator and Speaker.*

Links <https://www.iss.it/documents/20126/0/017D24-I+Programma.pdf/90de110f-5f37-c9ba-3cc0-ca8b496c9196> | <https://fabriziomattei.wixsite.com/home/copy-of-workshop-iss-2023>

28 NOV 2023 – 28 NOV 2023 Istituto Superiore di Sanità, Rome, Italy

Bridging Immunity to Cancer: The Contribution of The Tumor Microenvironment and Metabolism

- Type of event: online conference
- Role: *Organizer, Scientific coordinator, Moderator and Speaker*

Link <https://fabriziomattei.wixsite.com/home/copy-of-nanoinnovation2023-symposia>

21 SEP 2023 – 21 SEP 2023 Faculty of Civil Engineering, University of Rome "La Sapienza", Rome, Italy.

Nanoinnovation 2023 - Micro- and Nanofluidic Systems in Cancer Research

- Type of event: Parallel Symposia of the Nanoinnovation2023 Conference
- Role: *Chairman*

Links <https://fabriziomattei.wixsite.com/home/copy-of-siooc2023-conference> | <https://www.nanoinnovation2023.eu/home/> 28 JUN 2023 – 28 JUN 2023 React4Life (Genova, Italy) & Istituto Superiore di Sanità (Rome, Italy)

Organs-on-Chip: a smart approach to study the crosstalk between immune and tumor cells in onco-immunology research

- Type of event: online workshop
- Role: *Organizer, Presenter, Speaker and Chairman*

Links <https://fabriziomattei.wixsite.com/home/copy-of-react4life-seminar> | https://phd.uniroma1.it/web/seminari-react4life---organs-on-chip-a-smart-approach-to-study-the-crosstalk-between-immune-and-tumor-cells-in-onco-immunology-research_nS5333EN_EN.aspx

4 MAY 2023 – 5 MAY 2023 Aula Magna - National Research Council, Rome, Italy

SIOOC - First National Conference

- Type of event: Conference
- Role: *Co-Organizer*

Links <https://www.siooc.it/siooc2023/> | <https://fabriziomattei.wixsite.com/home/siooc2023-conference>

30 JAN 2023 – 30 JAN 2023 Aula Nitti-Bovet, Istituto Superiore di Sanità, Rome, Italy.

Integrating a 3D human tumor microenvironment and the MIVO organ on a chip technology for more predictive in vitro outcomes

- Type of event: Workshop
- Role: *Scientific coordinator, Organizer and Chairman*

Links <https://fabriziomattei.wixsite.com/home/react4life-seminar> | <https://www.react4life.com/mivo-technology/>

28 NOV 2022 – 29 NOV 2022 Istituto Superiore di Sanità, Rome, Italy

Bridging Immunity to Cancer: Models of Study and New Research Outcomes

- Type of event: Online conference

- Role: *Organizer, Scientific coordinator, Chairman, Speaker*

Link <https://fabriziomattei.wixsite.com/home/general-1>

16 SEP 2009 – 16 SEP 2009 Berlin, Germany

Immunity for life, Immunology for health - 2nd European Congress of Immunology

- Type of event: Conference
- Role: *Oral communication*
- Title of the presentation: ""Role of IRF-8 in the interface of melanoma tumor cell-immune system interaction"
- Day of the presentation: 16 September 2009

27 APR 2015 – 30 APR 2015 Ljubljana, Slovenia

Cancer Immunotherapy and Immunomonitoring 2015 (CITIM2015) International Conference

- Type of event: conference
- Role: *Invited Speaker*
- Title of the presentation: "Combining Type I IFN and 5-Aza-2'-Deoxycytidine to improve anti-tumor response against melanoma"
- Day of the presentation: 30 April 2015

Link <https://cancerimmuno.org/citim-conferences/citim2015/>

15 DEC 2015 – 15 DEC 2015 Università Campus Biomedico of Rome, Rome, Italy

New Technologies in Medicine - Conference

- Type of event: conference
- Role: *Invited Speaker*
- Title of the presentation: "Cell-on-Chip technology for oncology research"

16 MAY 2017 – 16 MAY 2017 Università Campus Biomedico of Rome (Rome, Italy).

Innovation in Biomedicine: in vitro and in silico Advanced Models - Conference

- Type of event: conference
- Role: *Organizing committee member and Invited Speaker*
- Title of the presentation: ""Cell-on-chip approaches as new strategies to investigate cancer and immune cell crosstalk in chemo and immunotherapy"

26 SEP 2017 – 29 SEP 2017 Faculty of Civil Engineering, University of Rome "La Sapienza", Rome, Italy.

Nanoinnovation 2017 International Conference

- Type of event: conference
- Role: *Invited Speaker*
- Title of the presentation: "Exploiting Microfluidic chips to investigate cancer and immune cells crosstalk"
- Day of the presentation: 27 September 2017

Link <https://www.nanoinnovation.eu/2017/>

5 JUL 2018 – 6 JUL 2018 Università della Campania "L. Vanvitelli", Naples, Italy

Cancer Epigenetic Therapies: new targets, new combinations and link to immunotherapy - Third Conference

- Type of event: conference
- Role: *Invited Speaker*
- Title of the presentation: "Use of epigenetic drugs plus immunotherapy to improve the crosstalk between cancer and immune cells"
- Day of the presentation: 5 July 2018

17 JUN 2025 – 20 JUN 2025 Perugia (Italy)

15th SIICA Congress - Perugia

- Type of event: International Congress
- Role: Oral communication
- Title of the presentation: "Decitabine and IL-33/ST2 axis cooperate against melanoma through remodeling the tumor microenvironment to overcome resistance to PD-1 blockade"
- Day of the presentation: June 18, 2025

Link <https://siica.it/15th-siica-congress-june-17-20-2025/>

18 SEP 2025 – 20 SEP 2025 Verona (Italy)

Annual Meeting - Alliance Against Cancer 2025

- Type of event: International Congress
- Role: Oral communication

- Title of the presentation: "Decitabine and IL-33/ST2 axis synergize to circumvent resistance to PD-1 blockade in melanoma by reshaping the tumor microenvironment and promoting cancer-immune crosstalk."
- Day of the presentation: September 19, 2025

Link <https://alleanzacontroilcancro.it/annual-meeting-acc-2025-aperte-le-iscrizioni-e-la-sottomissione-abstracts/>

16 JUN 2026 – 19 JUN 2026 Brescia, Italy

16th SIICA Congress - Brescia

- Type of event: International Congress
- Role: Oral communication
- Title of the presentation: "Decitabine and IL-33/ST2 axis synergize to circumvent resistance to PD-1 blockade in melanoma by reshaping the tumor microenvironment and promoting cancer-immune crosstalk."
- Day of the presentation: June 17, 2026.

EDITORIAL ACTIVITY

1 JAN 2011 – CURRENT

Associate Editor, American Journal of Cancer Research

- Publisher: eCentury Publishing Corporation

Link https://e-century.us/web/journal_editorial_board.php?journal=ajcr

22 OCT 2012 – CURRENT

Associate Editor, Frontiers in Immunology

- Editorial Board section membership: Molecular Innate Immunity
- Publisher: Frontiers Media S.A.

Link <https://www.frontiersin.org/journals/immunology/editors>

22 OCT 2012 – CURRENT

Associate Editor, Frontiers in Oncology

- Editorial Board section membership: Molecular Innate Immunity
- Publisher: Frontiers Media S.A.

Link <https://www.frontiersin.org/journals/oncology/editors>

1 JUN 2014 – CURRENT

Editorial Board Member, Scientific Reports

- Editorial Board section membership: Cancer
- Publisher: Nature Publishing Group

Link <https://www.nature.com/srep/about/editors#editorial-board>

7 JUL 2014 – CURRENT

Editorial Board Member, Oncoimmunology

- Publisher: Taylor & Francis Online

Link <https://www.tandfonline.com/journals/koni20/about-this-journal#journal-metrics>

1 JAN 2015 – CURRENT

Editorial Board Member, BMC Cancer

- Publisher: Biomed Central/Springer Nature

Link <https://bmccancer.biomedcentral.com/about/editorial-board>

1 MAY 2016 – 1 MAY 2017

Special Issue Managing Editor, Frontiers in Bioscience (Landmark Edition)

- Special issue title: "Role of the Immunoenvironment in the progression of solid cancers"
- Special issue article contributions: 4
- Publisher: IMR Press

Link <https://www.imrpress.com/journal/FBL>

1 JAN 2018 – CURRENT

Academic Editor, PLOS One

- Editorial section: Immunology - General
- Classifications: Biology and life sciences, Immune cells, Antigen-presenting cells, Monocytes, T cells, Cytokines, Lymphoid organs, Immunology, Immune evasion, Immune response, Immune system, Immunity, Immunomodulation, Antigen processing and recognition, Medicine and health sciences, Basic cancer research, Metastasis, Tumor physiology, Cancers and neoplasms, Melanoma, Skin tumors.
- Publisher: Public Library of Science (PLOS)

Link https://journals.plos.org/plosone/static/editorial-board?ae_name=Fabrizio+Mattei

1 DEC 2021 – 20 APR 2023

Lead Guest Editor, iScience

- Publisher: Cell Press;
- Special Issue title: "Biophysics of tumor-immune dynamics";
- Other Special Issue co-Guest Editors: Prof. Mohit Kumar Jolly (Indian Institute of Science, Bangalore, India), Dr. Kandice Tanner (National Cancer Institute, Bethesda, MD, United States of America);
- Number of Special Issue article contributions: 13 (including the Editorial/Backstory article).

Link <https://www.sciencedirect.com/special-issue/10SCR463PS9>

1 MAY 2024 – CURRENT

Editorial Board Member, Cells

Publisher: MDPI

Link <https://www.mdpi.com/journal/cells/editors>

26 FEB 2025 – CURRENT

Associate Editor, Journal of Translational Medicine

Associate Editor for the section "Combination Therapy" of the Editorial Board.

Link <https://translational-medicine.biomedcentral.com/about/editorial-board>

9 MAY 2025 – CURRENT

Guest Editor, Cancer Letters

Planning and editing of a Special Issue to be published in Cancer Letters (Elsevier) as a collection of original research articles and review articles.

Special Issue Title: Advanced models for dissecting the complexity of tumor microenvironment, anti-cancer drug mechanisms and combination therapy efficacy: the road to personalized medicine.

Short title: Novel approaches to cancer therapy.

19 JUN 2025 – CURRENT

Guest Editor, Seminars in Cancer Biology

Planning a collection of selected reviews upon invitation to international top scientists leaders in their professional fields of study.

Link <https://www.sciencedirect.com/journal/seminars-in-cancer-biology>

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Rome, Italy , 25 Jun 2026



Fabrizio Mattei