



Università degli Studi di Roma "Tor Vergata"
CURRICULUM DIDATTICO-SCIENTIFICO DEL PROF. CHIARA FOCACCETTI

DATI PERSONALI

Nome e Cognome: Chiara Focaccetti

Luogo e data di nascita: Roma, 07/01/1978

ATTUALE POSIZIONE: Ricercatore t.d. tipo B di Patologia Generale

Dipartimento: Scienze Cliniche e Medicina Traslazionale

Indirizzo: Via Montpellier, 1

Numero studio: +390672596667

E-mail: chiara.focaccetti@uniroma2.it

Orario ricevimento: su appuntamento

Settore scientifico-disciplinare: MED04

ATTIVITA' DIDATTICA - SCIENTIFICA

Titoli accademici e di studio:

2003. Laurea in Biologia (110/110 e Lode), Università di Roma "Tor Vergata". **2005. Abilitazione Professione Biologo**, Università di Roma "Tor Vergata", O.N.B., Sezione A, AA_070306. **2007. Dottore di Ricerca**, Università di Roma "Tor Vergata". **2013. Abilitazione all'insegnamento nella scuola secondaria di secondo grado** (TFA classe A050, 98/100), Università di Roma "Tor Vergata". **2017. Specializzazione in Biochimica Clinica** (area non medica, 50/50 e Lode), Università di Roma "Tor Vergata".

2006 – 2007. Research Assistant, Institute of Human Virology IHV, University of Maryland, School of Medicine, Baltimore, MD, USA.

2017-2018. Assegnista di ricerca, Università "La Sapienza".

2019-2021. Ricercatore t.d. A, SSD MED04 (Patologia Generale), Università Telematica San Raffaele, Roma.

2021-oggi. Ricercatore t.d. B, SSD MED04 (Patologia Generale), Facoltà di Medicina e Chirurgia, Università di Roma "Tor Vergata".

Formazione post-laurea presso istituzioni italiane ed estere ed incarichi professionali:

2003. Ricercatore per Tecnofarmaci S.C.p.A., Università di Roma "Tor Vergata".

2009-2012. Ricercatore Borsista post-doc presso IRCCS MultiMedica, Fondazione MultiMedica ONLUS, MultiMedica Holding S.p.A., Milano.

2012. Ricercatore Borsista post-doc presso Arcispedale Santa Maria Nuova, Istituto in Tecnologie Avanzate e Modelli Assistenziali in Oncologia IRCCS, Reggio Emilia.

2012-2016. Ricercatore Borsista post-doc per Fondazione Francesco Balsano, Immunology Unit presso Università "La Sapienza".

2015-2016. Ricercatore Borsista Post-Doc per Fondazione Umberto Veronesi, Immunology Unit presso Università "La Sapienza".

2018-2019. Docente di ruolo, MIUR Istituto Istruzione Superiore "Amari - Mercuri", Ciampino (RM).

Insegnamento di Patologia Generale nel CL Biotecnologie Mediche, Infermieristica, Ostetricia, Logopedia, Tec. Riab. Psych., Igiene dent., Tec. Fisiopat. Cardiocirc. Perf. Vasc., Tec. Audioprot., Tec. Ortop., Tec. Rad. Med. Immag. Radioter. (**Università di Roma "Tor Vergata"**). CL Scienze Attività Motorie Preventive e Adattate (**Università Telematica, San Raffaele Roma**).

Finanziamenti e premi ricevuti per attività di ricerca:

2015. **Borsa di Studio** Fondazione Umberto Veronesi.

2002. **Borsa di Studio Erasmus** presso Aarhus Universitet, Aarhus, Danimarca.

Attività di ricerca: 15 pubblicazioni selezionate:

- 1) Feizi N, **Focaccetti C**, Pacella I, et al. - CD8+ T cells specific for cryptic apoptosis-associated epitopes exacerbate experimental autoimmune encephalomyelitis. *Cell Death Dis.* 2021 Oct 29;12(11):1026. doi: 10.1038/s41419-021-04310-6.
- 2) Benvenuto M*, Ciuffa S*, **Focaccetti C***, et al - Proteasome inhibition by bortezomib parallels a reduction in head and neck cancer cells growth, and an increase in tumor-infiltrating immune cells. *Sci Rep.* 2021 Sep 24;11(1):19051. doi: 10.1038/s41598-021-98450-6.
- 3) Benvenuto M*, **Focaccetti C***, Ciuffa S, et al. - Polyphenols affect the humoral response in cancer, infectious and allergic diseases and autoimmunity by modulating the activity of TH1 and TH2 cells. *Curr Opin Pharmacol.* 2021 Oct;60:315-330. doi: 10.1016/j.coph.2021.08.005. Epub 2021 Sep 11.
- 4) Brandetti E, **Focaccetti C**, Pezzolo A, et al. - Enhancement of Neuroblastoma NK-Cell-Mediated Lysis through NF- κ B p65 Subunit-Induced Expression of FAS and PVR, the Loss of Which Is Associated with Poor Patient Outcome. *Cancers (Basel).* 2021 Aug 29;13(17):4368. doi: 10.3390/cancers13174368.
- 5) Masuelli L, Benvenuto M, **Focaccetti C**, et al. - Targeting the tumor immune microenvironment with "nutraceuticals": From bench to clinical trials. *Pharmacol Ther.* 2021 Mar;219:107700. doi: 10.1016/j.pharmthera.2020.107700. Epub 2020 Oct 9. Citations: 0; I.F.: 10.557
- 6) **Focaccetti C***, Benvenuto M*, Ciuffa S, et al. Curcumin Enhances the Antitumoral Effect Induced by the Recombinant Vaccinia Neu Vaccine (rV-neuT) in Mice with Transplanted Salivary Gland Carcinoma Cells. *Nutrients.* 2020;12(5):E1417. Published 2020 May 14. doi:10.3390/nu12051417
- 7) Benvenuto M*, **Focaccetti C***, Izzi V*, et al. - Tumor antigens heterogeneity and immune response-targeting neoantigens in breast cancer - *Semin Cancer Biol.* 2019 Nov 4. pii: S1044-579X(19)30299-8. doi:10.1016/j.semcancer.2019.10.023
- 8) **Focaccetti C***, Izzi V*, Benvenuto M, et al. - Polyphenols as Immunomodulatory Compounds in the Tumor Microenvironment: Friends or Foes? - *Int J Mol Sci.* 2019 Apr 6;20(7). pii:E1714. doi: 10.3390/ijms20071714.
- 9) Pacella I, Procaccini C, **Focaccetti C**, et al. - Fatty acid metabolism complements glycolysis in the selective regulatory T cell expansion during tumor growth - *Proc Natl Acad Sci U S A.* 2018 Jul 10;115(28):E6546-E6555. doi: 10.1073/pnas.1720113115. Epub 2018 Jun 25.
- 10) Pacella I, Cammarata I, **Focaccetti C**, et al. - Wnt3a Neutralization Enhances T-cell Responses through Indirect Mechanisms and Restrains Tumor Growth. *Cancer Immunol Res.* 2018 Aug;6(8):953-964. doi: 10.1158/2326-6066.CIR-17-0713. Epub 2018 Jul 17. PMID: 30018042.
- 11) Timperi E, **Focaccetti C**, Gallerano D, et al. - IL-18 receptor marks functional CD8+ T cells in non-small cell lung cancer – *Oncoimmunology*, 2017 May 12; 6 (7): e1328337. doi.org/10.1080/2162402X.2017.1328337.
- 12) **Focaccetti C**, Bruno A, Magnani E, et al. – Effects of 5-Fluorouracil on morphology, cell cycle, proliferation, apoptosis, autophagy and ROS production in endothelial cells and cardiomyocytes - *PLoS One.* 2015 Feb 11;10(2):e0115686. doi: 10.1371/journal.pone.0115686.
- 13) Bruno A*, **Focaccetti C***, Pagani A, et al. - The pro-angiogenic phenotype of Natural Killer cell in patients with non small cell lung cancer – *Neoplasia.* 2013 Feb;15(2):133-42.
- 14) Masuelli L, Marzocchella L, **Focaccetti C**, et al. – Local delivery of recombinant vaccinia virus encoding for neu counteracts growth of mammary tumors more efficiently than systemic delivery in neu transgenic mice – *Cancer Immunol Immunother.* 2010 Aug; 59(8):1247-58;
- 15) Masuelli L, **Focaccetti C**, Cereda V, et al. - Gene-specific inhibition of breast carcinoma in BALB-neuT mice by active immunization with rat Neu or human ErbB receptors - *Int J Oncol.* 2007 Feb;30(2):381-92.



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ACADEMIC AND SCIENTIFIC CURRICULUM OF PROF. CHIARA FOCACCETTI

PERSONAL DATA

Name and Surname: Chiara Focaccetti

Place and date of birth: Roma, 07/01/1978

CURRENT POSITION: Assistant Professor of General Pathology

Department: Clinical Sciences and Translational Medicine

Address: Via Montpellier, 1

Phone number: +390672596667

E-mail: Chiara.focaccetti@uniroma2.it

Consulting hours: by appointment

Italian Ministry of Education Academic-Scientific sector: MED04

SCIENTIFIC AND DIDACTIC ACTIVITY

Education and academic positions:

2003. Biological Sciences Degree (110/110 cum laude), University of Rome "Tor Vergata". **2005.**

Qualification as Biologist, University of Rome "Tor Vergata", O.N.B., Section A, AA_070306. **2007. Ph.**

D., University of Rome "Tor Vergata". **2013. High School teaching qualification** (TFA classe A050, 98/100), University of Rome "Tor Vergata". **2017. Specialist in Clinical Biochemistry** (non medical area, 50/50 cum laude), University of Rome "Tor Vergata".

2006 – 2007. Research Assistant, Institute of Human Virology IHV, University of Maryland, School of Medicine, Baltimore, MD, USA.

2017-2018. Assegnista di ricerca, University of Rome "La Sapienza".

2019-2021. Researcher of General Pathology (SSD MED04), San Raffaele Roma Open University.

2021-today. Associate Professor of General Pathology (SSD MED04), Faculty of Medicine, University of Rome "Tor Vergata".

Professional and didactic activities in Italian and Foreign Institutions:

2003. Researcher at Tecnofarmaci S.C.p.A., University of Rome "Tor Vergata".

2009-2012. Post Doc Researcher at IRCCS MultiMedica, Fondazione MultiMedica ONLUS, MultiMedica Holding S.p.A., Milano.

2012. Post Doc Researcher at Arcispedale Santa Maria Nuova, Istituto in Tecnologie Avanzate e Modelli Assistenziali in Oncologia IRCCS, Reggio Emilia.

2012-2016. Post Doc Researcher at Fondazione Francesco Balsano, Immunology Unit, University of Rome "La Sapienza".

2015-2016. Post Doc Researcher at Fondazione Umberto Veronesi, Immunology Unit, University of Rome "La Sapienza".

2018-2019. High School Teacher, MIUR Istituto Istruzione Superiore "Amari - Mercuri", Ciampino (RM).

Teaching activity of General Pathology for CL Medical Biotechnology, Nursing, Midwifery, Speech Therapist, psychiatric rehabilitation technicians, Dental Hygiene, Cardiocirculatory physiology and cardiovascular perfusion techniques, Audioprosthesis techniques, Orthopedic techniques, Medical

radiology techniques for imaging and radiotherapy (**University of Rome “Tor Vergata”**). Prev and Adapted Motory Activity Science (**San Raffaele Roma Open University**).

Awards and funding:

2015. Research Fellowship. Fondazione Umberto Veronesi.

2002. Erasmus Project Fellowship, Aarhus Universitet, Aarhus, Denmark.

Research activity: 15 most significant publications

- 1) Feizi N, **Focaccetti C**, Pacella I, et al. - CD8+ T cells specific for cryptic apoptosis-associated epitopes exacerbate experimental autoimmune encephalomyelitis. *Cell Death Dis.* 2021 Oct 29;12(11):1026. doi: 10.1038/s41419-021-04310-6.
- 2) Benvenuto M*, Ciuffa S*, **Focaccetti C***, et al - Proteasome inhibition by bortezomib parallels a reduction in head and neck cancer cells growth, and an increase in tumor-infiltrating immune cells. *Sci Rep.* 2021 Sep 24;11(1):19051. doi: 10.1038/s41598-021-98450-6.
- 3) Benvenuto M*, **Focaccetti C***, Ciuffa S, et al. - Polyphenols affect the humoral response in cancer, infectious and allergic diseases and autoimmunity by modulating the activity of TH1 and TH2 cells. *Curr Opin Pharmacol.* 2021 Oct;60:315-330. doi: 10.1016/j.coph.2021.08.005. Epub 2021 Sep 11.
- 4) Brandetti E, **Focaccetti C**, Pezzolo A, et al. - Enhancement of Neuroblastoma NK-Cell-Mediated Lysis through NF- κ B p65 Subunit-Induced Expression of FAS and PVR, the Loss of Which Is Associated with Poor Patient Outcome. *Cancers (Basel).* 2021 Aug 29;13(17):4368. doi: 10.3390/cancers13174368.
- 5) Masuelli L, Benvenuto M, **Focaccetti C**, et al. - Targeting the tumor immune microenvironment with "nutraceuticals": From bench to clinical trials. *Pharmacol Ther.* 2021 Mar;219:107700. doi: 10.1016/j.pharmthera.2020.107700. Epub 2020 Oct 9. Citations: 0; I.F.: 10.557
- 6) **Focaccetti C***, Benvenuto M*, Ciuffa S, et al. Curcumin Enhances the Antitumoral Effect Induced by the Recombinant Vaccinia Neu Vaccine (rV-neuT) in Mice with Transplanted Salivary Gland Carcinoma Cells. *Nutrients.* 2020;12(5):E1417. Published 2020 May 14. doi:10.3390/nu12051417
- 7) Benvenuto M*, **Focaccetti C***, Izzi V*, et al. - Tumor antigens heterogeneity and immune response-targeting neoantigens in breast cancer - *Semin Cancer Biol.* 2019 Nov 4. pii: S1044-579X(19)30299-8. doi:10.1016/j.semcancer.2019.10.023
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- 9) Pacella I, Procaccini C, **Focaccetti C**, et al. - Fatty acid metabolism complements glycolysis in the selective regulatory T cell expansion during tumor growth - *Proc Natl Acad Sci U S A.* 2018 Jul 10;115(28):E6546-E6555. doi: 10.1073/pnas.1720113115. Epub 2018 Jun 25.
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- 11) Timperi E, **Focaccetti C**, Gallerano D, et al. - IL-18 receptor marks functional CD8+ T cells in non-small cell lung cancer – *Oncoimmunology*, 2017 May 12; 6 (7): e1328337. doi.org/10.1080/2162402X.2017.1328337.
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- 13) Bruno A*, **Focaccetti C***, Pagani A, et al. - The pro-angiogenic phenotype of Natural Killer cell in patients with non small cell lung cancer – *Neoplasia.* 2013 Feb;15(2):133-42.
- 14) Masuelli L, Marzocchella L, **Focaccetti C**, et al. – Local delivery of recombinant vaccinia virus encoding for neu counteracts growth of mammary tumors more efficiently than systemic delivery in neu transgenic mice – *Cancer Immunol Immunother.* 2010 Aug; 59(8):1247-58;
- 15) Masuelli L, **Focaccetti C**, Cereda V, et al. - Gene-specific inhibition of breast carcinoma in BALB-neuT mice by active immunization with rat Neu or human ErbB receptors - *Int J Oncol.* 2007 Feb;30(2):381-92.