Università di Roma Tor Vergata

UniversitàdegliStudidiRoma"TorVergata"

CURRICULUM DIDATTICO-SCIENTIFICO DEL PROF.

DATI PERSONALI

Nome e Cognome: Mariachiara Carestia
Luogo e data di nascita: Roma, 31/03/1984

***ATTUALE POSIZIONE*:** Assegnista di Ricerca
Dipartimento: Biomedicina e Prevenzione
Indirizzo: Via Montpellier 1
Numero studio:
E-mail: mariachiara.carestia@uniroma2.it
Orario ricevimento: tutti i giorni previo appuntamento
Settore scientifico-disciplinare: MED42

ATTIVITA' DIDATTICA - SCIENTIFICA

Titoli accademici e di studio:

PhD – Università degli studi di Roma Tor Vergata, Ingegneria Industriale, 2016.

MS - Università degli studi di Roma Tor Vergata, Biologia cellulare e molecolare, 2011. Valutazione: 110 e lode.

Tesi: "Costruzione di un sistema biologico per lo studio degli oligopeptidi inibitori delle interazioni proteina-proteina del divisoma batterico".

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

Valutazione: *Excellent*. Tesi: "Spectral Analysis of Biological Agents to Implement a toll for fast Biological Detection".

Master di II livello - Università degli studi di Roma Tor Vergata, in *Protezione da Eventi CBRNe. Valutazione*: 110 e lode.

Tesi: "Biodosimetria e biodosimetria retrospettiva durante le emergenze radiologiche".

01/03/2021 – in corso Assegno di ricerca di 1° fascia per la collaborazione ad attività di ricerca relativa alla "Programmazione ed implementazione di un intervento vaccinale in Libano su popolazioni vulnerabili" – Dipartimento di Biomedicina e Prevenzione – Università degli Studi di Roma Tor Vergata

15/01/2019 14/01/2020 Assegno di ricerca di 1° fascia per la collaborazione ad attività di ricerca relativa al programma "MELODY: Sviluppo ed armonizzazione di un training curriculum per medici e operatori di primo soccorso" , settore disciplinare MED/42 finanziato nel programma: UE - H2020 - MELODY Università degli Studi di Roma Tor Vergata

11/11/2017 31/10/2018 Assegno di ricerca di 1° fascia per la collaborazione ad attività di ricerca relativa al programma "enotice - Rete di cbrne TC per organizzare attività di training e debriefing" ,settore disciplinare MED/42 finanziato nel programma: UE - H2020 - enotice Università degli Studi di Roma Tor Vergata

15/12/2016 14/12/2017 Assegno di ricerca di 1° fascia per la collaborazione ad attività di ricerca relativa Sistema diagnostico per la rivelazione di minacce Biologiche nell'ambito cbrne -setore scientifico-disciplinare ING-IND/35 Università degli Studi di Roma Tor Vergata

15/12/2015 14/12/2016 Assegno di ricerca di 1° fascia per la collaborazione ad attività di ricerca

relativa allo sviluppo di un Sistema diagnostico per la rivelazione di minacce Biologiche nell'ambito cbrne -settore scientifico-disciplinare ING-IND/35 Università degli Studi di Roma Tor Vergata

15/12/2013 14/03/2015 Assegno di ricerca di 1° fascia per la collaborazione ad attività di ricerca relativa allo Sviluppo di un sistema integrato di risposta sul CBRN in Italia - settore scientifico-disciplinare ING-IND/35 Finanziato nel programma: UE - DG HOME Grant Agreement No.Home/2012/ISEC/AG/CBRN/4000003799 Università degli Studi di Roma Tor Vergata

Attività di ricerca: 15 pubblicazioni selezionate

1. Anselmi M., Carestia M., Divizia A., Divizia M., Di Giovanni D., Gaudio P., Malizia A., Martellucci L., Palombi L., Rossi R.,"On the use of laser-induced fluorescence for biological agent detection",2021,"Nuovo Cimento della Societa Italiana di Fisica C","44","4-5","150","","",,"10.1393/ncc/i2021-21150-2","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85112550104&doi=10.1393%2fncc%2fi2021-21150-2&partnerID=40&md5=2e1c5f3040bd553f4b0bf70e26fad893"
2. Baldassi F., Carestia M., Moramarco S., Malizia A., Gaudio P.,"Infectious diseases seeker (Ids): An innovative tool for prompt identification of infectious diseases during outbreaks",2021,"International Journal of Environmental Research and Public Health","18","6","3216","1","13",,"10.3390/ijerph18063216","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85102694699&doi=10.3390%2fijerph18063216&partnerID=40&md5=1d08a83a407253daabe35a114df32f78"
3. Spena A., Palombi L., Corcione M., Quintino A., Carestia M., Spena V.A.,"Predicting sars-cov-2 weather-induced seasonal virulence from atmospheric air enthalpy",2020,"International Journal of Environmental Research and Public Health","17","23","9059","1","14",,"10.3390/ijerph17239059","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097313714&doi=10.3390%2fijerph17239059&partnerID=40&md5=a607fe3bb2b4db934059e87ed4ad1243"
4. Moramarco S., Morciano L., Morucci L., Messinese M., Gualtieri P., Carestia M., Ciccacci F., Orlando S., Buonomo E., Legramante J.M., De Lorenzo A., Palombi L.,"Epidemiology of hypoalbuminemia in hospitalized patients: A clinical matter or an emerging public health problem?",2020,"Nutrients","12","12","3656","1","15",,"10.3390/nu12123656","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097038176&doi=10.3390%2fnu12123656&partnerID=40&md5=892c1ae0a4e2276fe528b6c07da99a68"
5. Spena A., Palombi L., Corcione M., Carestia M., Spena V.A.,"On the optimal indoor air conditions for sars-cov-2 inactivation. An enthalpy-based approach",2020,"International Journal of Environmental Research and Public Health","17","17","6083","1","15",,"10.3390/ijerph17176083","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089699177&doi=10.3390%2fijerph17176083&partnerID=40&md5=97639d05713701fe1263d144a8a7486c"
6. Carestia M., Troiani F., Caldari R., Civica M., Bruno F., Vicini C., Di Giovanni D., Iannotti A., Russo C., Thornton M., Palombi L., d'Errico F., Bellecci C., Gaudio P., Malizia A.,"CBRNe as Conceptual Frame of an All Hazards Approach of Safety and Security: The Creation of Organic Networks of Military, Civil, Academic/Research and Private Entities at National and International Level to Generate Solutions for Risk Reduction – A European and Italian Perspective",2020,"NATO Science for Peace and Security Series A: Chemistry and Biology",,,"307","315",,"10.1007/978-94-024-2030-2_23","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85091175243&doi=10.1007%2f978-94-024-2030-2_23&partnerID=40&md5=62f3f1b72b88622718c8997d32267ffb"
7. Gabbarini V., Rossi R., Ciparisse J.-F., Malizia A., Divizia A., De Filippis P., Anselmi M., Carestia M., Palombi L., Divizia M., Gaudio P.,"Laser-induced fluorescence (LIF) as a smart method for fast environmental virological analyses: validation on Picornaviruses",2019,"Scientific Reports","9","1","12598","","",,"10.1038/s41598-019-49005-3","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071749727&doi=10.1038%2fs41598-019-49005-3&partnerID=40&md5=ce1212427d5473dbfcdbb9c545838798"
8. Bruno F., Carestia M., Civica M., Gaudio P., Malizia A., Troiani F., Sciacqua R., Spezia U.,"CBRN risk scenarios",2018,"NATO Science for Peace and Security Series A: Chemistry and Biology",,,"309","317",,"10.1007/978-94-024-1304-5_23","https://www.scopus.com/inward/record.uri?eid=2-

s2.0-85049957943&doi=10.1007%2f978-94-024-1304-5_23&partnerID=40&md5=f53a8374ea5fedb525389fc950d6f394"
9. Gaudio P., Malizia A., Gelfusa M., Murari A., Parracino S., Poggi L.A., Lungaroni M., Ciparisse J.F., Giovanni D.D., Cenciarelli O., Carestia M., Peluso E., Gabbarini V., Talebzadeh S., Bellecci C.,"Lidar and Dial application for detection and identification: A proposal to improve safety and security",2017,"Journal of Instrumentation","12","1","C01054","","",,"10.1088/1748-0221/12/01/C01054","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85012077014&doi=10.1088%2f1748-0221%2f12%2f01%2fC01054&partnerID=40&md5=cb92c12230b86fcc81ccd2655a1115fa"
10. Gaudio P., Gelfusa M., Andrea M., Pizzoferrato R., Carestia M., Cenciarelli O., Parracino S., Gianmarco L., Gabriele J., Gabbarini V., Di Giovanni D., Rossi R., Ciparisse J.F., Carlo B., Malizia A.,"Application of optical techniques to detect chemical and biological agents",2017,"Defence S and T Technical Bulletin","10","1",,"1","13",,,"https://www.scopus.com/inward/record.uri?eid=2-s2.0-85017469286&partnerID=40&md5=e1ff1a4d047762daf3dfadc341be345a"
11. Baldassi F., D'Amico F., Carestia M., Cenciarelli O., Mancinelli S., Gilardi F., Malizia A., Di Giovanni D., Soave P.M., Bellecci C., Gaudio P., Palombi L.,"Testing the accuracy ratio of the Spatio-Temporal Epidemiological Modeler (STEM) through Ebola haemorrhagic fever outbreaks",2016,"Epidemiology and Infection","144","7",,"1463","1472",,"10.1017/S0950268815002939","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84966400997&doi=10.1017%2fS0950268815002939&partnerID=40&md5=c1b3e86c1738968971bb6983fd4b5702"
12. Carestia M., Malizia A., Barlascini O., Fiorini E., Soave P.M., Latini G., Cenciarelli O., D'Amico F., Bellecci C., Gaudio P.,"Use of the "hotspot" code for safety and security analysis in nuclear power plants: A case study",2016,"Environmental Engineering and Management Journal","15","4",,"905","912",,"10.30638/eemj.2016.098","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84992323207&doi=10.30638%2feemj.2016.098&partnerID=40&md5=473dd7420bd6658f4c86936bb2ccfa6a"
13. Gelfusa M., Murari A., Lungaroni M., Malizia A., Parracino S., Peluso E., Cenciarelli O., Carestia M., Pizzoferrato R., Vega J., Gaudio P.,"A support vector machine approach to the automatic identification of fluorescence spectra emitted by biological agents",2016,"Proceedings of SPIE - The International Society for Optical Engineering","9995",,"99950X","","",,"10.1117/12.2241164",https://www.scopus.com/inward/record.uri?eid=2-s2.0-85011076103&doi=10.1117%2f12.2241164&partnerID=40&md5=383e5aebfe92fe1f9fb991dde14534a4
14. Carestia M., Pizzoferrato R., Gelfusa M., Cenciarelli O., Ludovici G.M., Gabriele J., Malizia A., Murari A., Vega J., Gaudio P.,"Development of a rapid method for the automatic classification of biological agents' fluorescence spectral signatures",2015,"Optical Engineering","54","11","114105","","",,"10.1117/1.OE.54.11.114105","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84948799875&doi=10.1117%2f1.OE.54.11.114105&partnerID=40&md5=ad8ef3cd414bcc0d52123848b1df7f22"
15. Carestia M., Pizzoferrato R., Lungaroni M., Gabriele J., Ludovici G.M., Cenciarelli O., Gelfusa M., Murari A., Malizia A., Gaudio P.,"Multispectral analysis of biological agents to implement a quick tool for stand-off biological detection",2015,"Proceedings of SPIE - The International Society for Optical Engineering","9652",,"965204","","",,"10.1117/12.2194988","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84958231401&doi=10.1117%2f12.2194988&partnerID=40&md5=f27d5094ccd949e8853b092fde1ba5ba"

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ACADEMIC AND SCIENTIFIC CURRICULUM OF PROF.

PERSONAL DATA
Name and Surname: Mariachiara Carestia
Place and date of birth: Rome, 31/03/1984

***CURRENT POSITION*:** Research Fellow
Department: Biomedicine and Prevention
Address: Via Montpellier 1
Phone number:
E-mail: Mariachiara.carestia@uniroma2.it
Consulting hours: all days by schedule
Italian Ministry of Education Academic-Scientific sector: MED 42

SCIENTIFIC AND DIDACTIC ACTIVITY

Education and academic positions:

PhD - University of Rome Tor Vergata (2013-2016) – Excellent
"Spectral Analysis of Biological Agents to Implement a tool for fast Biological Detection".

Post graduate course "Protection against CBRNe events" - University of Rome Tor Vergata (2012-2013) – 110 cum laude
"Biodosimetry and retrospective biodosimetry during radiological emergencies". Supervisor: Dr. Pasquale Gaudio, Co-supervisor: Dr. Paola Fattibene

MSc Cell and Molecular Biology - University of Rome Tor Vergata (2009-2011) – 110 cum laude
"Construction of a biological system for the study of inhibitory oligopeptides of the bacterial divisome's protein-protein interactions." Supervisor: Prof. Luisa Castagnoli, Co-supervisor. Dr. Patrizia Ghelardini.

Professional and didactic activities in Italian and Foreign Institutions:

Research fellow of the University of Rome Tor Vergata
01/03/2021 – 28/03/2022
Financed project on "Programming and implementation of a vaccination intervention in Lebanon on vulnerable populations"
15/01/2019 – 14/01/2020
Financed project "MELODY: Development of a harmonized training curriculum for first responders and medical staff". Funded under the programme: EU - ISFP-2017-AG- PROTECT
11/11/2017 – 31/10/2018
Financed project "eNOTICE European Network of CBRN Training Centers". Funded under the programme: EU-H2020
15/12/2015 – 14/12/2017
Collaboration to research activities for the development of an optical diagnostic system for the detection of biological threats
15/12/2013 – 14/03/2015
Financed project "CBRN integrated response Italy". Funded under the programme EU-ISEC-2012-AG-CBRN

Contract professor University of Rome Tor Vergata

- Delivering teaching sessions on MSc Health Professions of Prevention Sciences
- Delivering teaching sessions on post graduate course Protection Against CBRNe events
- Supervising undergraduate dissertations
- Assisting with programme development and student assessment

Guest lecturer, IMT Mines Alès – école Mines-Télecom – France (2020 - 2022)

- Delivered lectures by invitation
- Supervised and assessed students

Guest lecturer, NATO school - Germany (2014)

- Delivered lectures by invitation
- Supervised and assessed students

Guest lecturer, Italian State Police - Italy (2014)

- Delivered lectures by invitation

Awards and funding:

Research activity: 15 most significant publications

1. Anselmi M., Carestia M., Divizia A., Divizia M., Di Giovanni D., Gaudio P., Malizia A., Martellucci L., Palombi L., Rossi R.,"On the use of laser-induced fluorescence for biological agent detection",2021,"Nuovo Cimento della Societa Italiana di Fisica C","44","4-5","150","","",,"10.1393/ncc/i2021-21150-2","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85112550104&doi=10.1393%2fncc%2fi2021-21150-2&partnerID=40&md5=2e1c5f3040bd553f4b0bf70e26fad893"
2. Baldassi F., Carestia M., Moramarco S., Malizia A., Gaudio P.,"Infectious diseases seeker (Ids): An innovative tool for prompt identification of infectious diseases during outbreaks",2021,"International Journal of Environmental Research and Public Health","18","6","3216","1","13",,"10.3390/ijerph18063216","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85102694699&doi=10.3390%2fijerph18063216&partnerID=40&md5=1d08a83a407253daabe35a114df32f78"
3. Spena A., Palombi L., Corcione M., Quintino A., Carestia M., Spena V.A.,"Predicting sars-cov-2 weather-induced seasonal virulence from atmospheric air enthalpy",2020,"International Journal of Environmental Research and Public Health","17","23","9059","1","14",,"10.3390/ijerph17239059","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097313714&doi=10.3390%2fijerph17239059&partnerID=40&md5=a607fe3bb2b4db934059e87ed4ad1243"
4. Moramarco S., Morciano L., Morucci L., Messinese M., Gualtieri P., Carestia M., Ciccacci F., Orlando S., Buonomo E., Legramante J.M., De Lorenzo A., Palombi L.,"Epidemiology of hypoalbuminemia in hospitalized patients: A clinical matter or an emerging public health problem?",2020,"Nutrients","12","12","3656","1","15",,"10.3390/nu12123656","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85097038176&doi=10.3390%2fnu12123656&partnerID=40&md5=892c1ae0a4e2276fe528b6c07da99a68"
5. Spena A., Palombi L., Corcione M., Carestia M., Spena V.A.,"On the optimal indoor air conditions for sars-cov-2 inactivation. An enthalpy-based approach",2020,"International Journal of Environmental Research and Public Health","17","17","6083","1","15",,"10.3390/ijerph17176083","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089699177&doi=10.3390%2fijerph17176083&partnerID=40&md5=97639d05713701fe1263d144a8a7486c"
6. Carestia M., Troiani F., Caldari R., Civica M., Bruno F., Vicini C., Di Giovanni D., Iannotti A., Russo C., Thornton M., Palombi L., d'Errico F., Bellecci C., Gaudio P., Malizia A.,"CBRNe as Conceptual Frame of an All Hazards Approach of Safety and Security: The Creation of Organic Networks of Military, Civil, Academic/Research and Private Entities at National and International Level to Generate Solutions for Risk Reduction – A European and Italian Perspective",2020,"NATO Science for Peace and Security Series A: Chemistry and Biology",,,"307","315",,"10.1007/978-94-024-2030-2_23","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85091175243&doi=10.1007%2f978-94-024-2030-2_23&partnerID=40&md5=62f3f1b72b88622718c8997d32267ffb"

7. Gabbarini V., Rossi R., Ciparisse J.-F., Malizia A., Divizia A., De Filippis P., Anselmi M., Carestia M., Palombi L., Divizia M., Gaudio P.,"Laser-induced fluorescence (LIF) as a smart method for fast environmental virological analyses: validation on Picornaviruses",2019,"Scientific Reports","9","1","12598","","",,"10.1038/s41598-019-49005-3","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071749727&doi=10.1038%2fs41598-019-49005-3&partnerID=40&md5=ce1212427d5473dbfcdbb9c545838798"
8. Bruno F., Carestia M., Civica M., Gaudio P., Malizia A., Troiani F., Sciacqua R., Spezia U.,"CBRN risk scenarios",2018,"NATO Science for Peace and Security Series A: Chemistry and Biology",,,,"309","317",,"10.1007/978-94-024-1304-5_23","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85049957943&doi=10.1007%2f978-94-024-1304-5_23&partnerID=40&md5=f53a8374ea5fedb525389fc950d6f394"
9. Gaudio P., Malizia A., Gelfusa M., Murari A., Parracino S., Poggi L.A., Lungaroni M., Ciparisse J.F., Giovanni D.D., Cenciarelli O., Carestia M., Peluso E., Gabbarini V., Talebzadeh S., Bellecci C.,"Lidar and Dial application for detection and identification: A proposal to improve safety and security",2017,"Journal of Instrumentation","12","1","C01054","","",,"10.1088/1748-0221/12/01/C01054","https://www.scopus.com/inward/record.uri?eid=2-s2.0-85012077014&doi=10.1088%2f1748-0221%2f12%2f01%2fC01054&partnerID=40&md5=cb92c12230b86fcc81ccd2655a1115fa"
10. Gaudio P., Gelfusa M., Andrea M., Pizzoferrato R., Carestia M., Cenciarelli O., Parracino S., Gianmarco L., Gabriele J., Gabbarini V., Di Giovanni D., Rossi R., Ciparisse J.F., Carlo B., Malizia A.,"Application of optical techniques to detect chemical and biological agents",2017,"Defence S and T Technical Bulletin","10","1",,"1","13",,,"https://www.scopus.com/inward/record.uri?eid=2-s2.0-85017469286&partnerID=40&md5=e1ff1a4d047762daf3dfadc341be345a"
11. Baldassi F., D'Amico F., Carestia M., Cenciarelli O., Mancinelli S., Gilardi F., Malizia A., Di Giovanni D., Soave P.M., Bellecci C., Gaudio P., Palombi L.,"Testing the accuracy ratio of the Spatio-Temporal Epidemiological Modeler (STEM) through Ebola haemorrhagic fever outbreaks",2016,"Epidemiology and Infection","144","7",,"1463","1472",,"10.1017/S0950268815002939","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84966400997&doi=10.1017%2fS0950268815002939&partnerID=40&md5=c1b3e86c1738968971bb6983fd4b5702"
12. Carestia M., Malizia A., Barlascini O., Fiorini E., Soave P.M., Latini G., Cenciarelli O., D'Amico F., Bellecci C., Gaudio P.,"Use of the "hotspot" code for safety and security analysis in nuclear power plants: A case study",2016,"Environmental Engineering and Management Journal","15","4",,"905","912",,"10.30638/eemj.2016.098","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84992323207&doi=10.30638%2feemj.2016.098&partnerID=40&md5=473dd7420bd6658f4c86936bb2ccfa6a"
13. Gelfusa M., Murari A., Lungaroni M., Malizia A., Parracino S., Peluso E., Cenciarelli O., Carestia M., Pizzoferrato R., Vega J., Gaudio P.,"A support vector machine approach to the automatic identification of fluorescence spectra emitted by biological agents",2016,"Proceedings of SPIE - The International Society for Optical Engineering","9995",,"99950X","","",,"10.1117/12.2241164",https://www.scopus.com/inward/record.uri?eid=2-s2.0-85011076103&doi=10.1117%2f12.2241164&partnerID=40&md5=383e5aebfe92fe1f9fb991dde14534a4
14. Carestia M., Pizzoferrato R., Gelfusa M., Cenciarelli O., Ludovici G.M., Gabriele J., Malizia A., Murari A., Vega J., Gaudio P.,"Development of a rapid method for the automatic classification of biological agents' fluorescence spectral signatures",2015,"Optical Engineering","54","11","114105","","",,"10.1117/1.OE.54.11.114105","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84948799875&doi=10.1117%2f1.OE.54.11.114105&partnerID=40&md5=ad8ef3cd414bcc0d52123848b1df7f22"
15. Carestia M., Pizzoferrato R., Lungaroni M., Gabriele J., Ludovici G.M., Cenciarelli O., Gelfusa M., Murari A., Malizia A., Gaudio P.,"Multispectral analysis of biological agents to implement a quick tool for stand-off biological detection",2015,"Proceedings of SPIE - The International Society for Optical Engineering","9652",,"965204","","",,"10.1117/12.2194988","https://www.scopus.com/inward/record.uri?eid=2-s2.0-84958231401&doi=10.1117%2f12.2194988&partnerID=40&md5=f27d5094ccd949e8853b092fde1ba5ba"