CURRICULUM VITAE

MASSIMO CARUSO

Associate Professor of Biochemistry *– Department of Biomedical and Biotechnological Sciences – University of Catania (Italy)*

Adjunct Professor of Biology *– College of Science and Technology" Temple University, Philadelphia (PE, USA)*

UNIVERSITY STUDIES AND QUALIFICATIONS:

2025-act	**Associate Professor of Biochemistry**- University of Catania - Department of Biomedical and Biotechnological Science
2023-act	**Adjunct Professor of Biology** - "College of Science and Technology" Temple University, Philadelphia (PE, USA)
2020-2025	**Assistant Professor of Biochemistry** - University of Catania - Department of Biomedical and Biotechnological Science.
2019-2025	**co-Principal Investigator (co-PI)** for the international "Replica" project, multicentric study that aim to replicate in vitro studies in toxicology of smoke and smokeless products. Founded by ECLAT Srl.
2017-2020	**Contract Professor** - University of Catania - Department of Medical and Surgical Sciences and Advanced Technologies "G.F. Ingrassia" - Degree Course: "Biomedical Laboratory Technician". SSD MED 04: Immunopathologies Techniques.
2017-2020	**Contract Professor** - University of Catania - Department of Medical and Surgical Sciences and Advanced Technologies "G.F. Ingrassia" - Degree Course: "Biomedical Laboratory Technician". SSD MED 04: Immunopathology.
2016-2020	**Contract Professor** - University of Catania - Department of Medical and Surgical Sciences and Advanced Technologies "G.F. Ingrassia" - Degree Course: "Nursing Sciences". SSD MED 04: General and Clinical Pathology .
2016-2017	**Contract Professor** - University of Catania - Department of Biological, Geological and Environmental Sciences - Degree Course: "Biological Sciences". SSD BIO 06: Cytology and Histology.
2016-2020	**Postdoctoral Research** - University of Catania - Department of Clinical and Experimental Medicine
2014-2016	**Principal Investigator Site** for the University of Catania in the European Project "U-BIOPRED" (Unbiased BIOmarkers for the PREDiction of respiratory disease outcomes" – European Communities's Seventh Framework Programme (FP7/2007-2013) – Innovative Medicine Initiative (IMI) (P.I. Prof Peter Sterk – Full professor of the Pathophysiology and Phenotyping of Asthma and COPD - Faculty of Medicine (Amsterdam Medical Centre of the Universiteit van Amsterdam (AMC-UvA)).
2011-2016	**Researcher** in 2 PO-FESR National supported research projects in Allergy and Immunology. Institute for Medical and Environmental Research (IRMA) and University of Catania.
2006-2007	**Research Associate** – Project "Study of cytokines profile in sputum from COPD patients" University of Catania - Department of Respiratory Diseases
2006	**PhD in Respiratory Diseases** – University of Catania.
2001	**Master's Degree in Biological Sciences**, University of Catania.

PROFESSIONAL EXPERIENCE:

2019-2025	**Co-Principal Investigator** – Multicentric International Research Project "Replica" (CoEHAR)
2023-2025	**Adjunct Professor of Biology** - "College of Science and Technology" Temple University, Philadelphia (PE, USA)
2018-2020	**Visiting Researcher** - **University of Catania** - Department of Biomedical and Biotechnological Sciences (BIOMETEC)
2016-2020	**Postdoctoral Research Fellow** - **University of Catania** - Department of Clinical and Experimental Medicine (Asthma and Immunology studies)
2011-2016	**Research Consultant** - **University of Catania** - Department of Clinical and Experimental Medicine (Asthma and Immunology studies)
2013-2015	**Researcher – IRMA Srl. – Principal Investigator site - Project: ALI.FU.ID.E.A.** (FUntional Foods and Nutraceutical Supplements based on White Lupine and Citrus derivatives) – Project

funded by a National Grant: POR FESR Sicilia 2007-2013 Linea di intervento 4.1.1.1 (P.I. for the partner – IRMA Srl).

2012-act **Research Consultant** – LIAF (Lega Italiana Antifumo – Italian Anti-Smoking League)

2012-2013 **Research Consultant – IRMA Srl - Project: S.A.M.A.R.A.** (Sistema Aerobiologico Molecolare e Analisi di Reattività Ambientale - Molecular Aerobiological System and Environmental Reactivity Analysis) – Project funded by a National Grant (PO FESR 2007/2013 - Avviso 2011 - Asse IV, Obiettivo Operativo 4.1.1 Linea di Intervento 4.1.1.2 (GURS n. 14 del 1/04/2011 e D.D.G. 2068/3 in GURS n. 23 del 27/05/2010).

2012-2012 **Technical Director -** I.R.M.A. (Istituto di Ricerca Medica ed Ambientale – Institute for Medical and Environmental Research) S.r.l – Registered in the National Register of Research Laboratories - Decree of Ministry of Education, University and Research n° 1417 GU n° 160 – 12/07/2005.

2010-2012 **Senior Researcher -** I.R.M.A. (Istituto di Ricerca Medica ed Ambientale – Institute for Medical and Environmental Research) S.r.l – Registered in the National Register of Research Laboratories - Decree of Ministry of Education, University and Research n° 1417 GU n° 160 – 12/07/2005.

2009-2010 **Senior Research Consultant** for the project "**Bionetwork**" – "**Group: Red Biotechnology**" (Biotechnologies applied to human health) - **Biosistema S.c.r.l**., public-private capital company and owner of the "Technological Competence Center for Advanced Biology" – Coordinated by Università degli Studi di Sassari, 07100 Sassari (SS)

2006-2011 **Researcher** - I.R.M.A. (Istituto di Ricerca Medica ed Ambientale – Institute for Medical and Environmental Research) S.r.l – Registered in the National Register of Research Laboratories - Decree of Ministry of Education, University and Research n° 1417 GU n° 160 – 12/07/2005.

2006-2011 **Laboratory Manager -** I.R.M.A. (Istituto di Ricerca Medica ed Ambientale) S.r.l – Iscritto all'Albo Nazionale dei Laboratori di Ricerca – Decree of MIUR n° 1417 GU n° 160 del 12/07/2005.

REVIEWER FOR SCIENTIFIC JOURNALS, among which:

- International Journal of Chronic Obstructive Pulmonary Disease
- International Immunopharmacology
- Therapeutic Advances in Chronic Disease
- BMC Public Health
- PLOS ONE
- Frontiers in Phisiology
- Toxics

EDITORIAL POSITIONS:

- Frontiers in Physiology - Associate Editor in Respiratory Physiology and Pathophysiology section
- BMC Pharmacology and Toxicology – Editorial Board Member
- Frontiers in Molecular Biosciences – Associate Editor in Molecular Diagnostics and Therapeutics
- Toxics – Guest Editor of the Special Issue on "Electronic Cigarettes and Heated Tobacco Products Aerosols Emission and Toxicity Evaluation"

REVIEWER FOR GRANT PROGRAMME:

- 2nd e 3rd Call of the Fellowship International Program **WHRI-ACADEMY (FP7 Marie Curie COFOUND scheme)**
- **European Respiratory Society Fellowship Grant (2017-2018)**

SPEAKER AND CHAIRMAN of a number of national and international symposia (EAACI, AAAAI, ERS, SiBioC).

GRANTS:

- 2012 AAAAI Fellow in Training International Travel Grant Scholarship (American Academy of Allergy, Asthma and Immunology)
- 2014 AAAAI Fellow in Training International Travel Grant Scholarship (American Academy of Allergy, Asthma and Immunology)

- 2014 Alain de Weck Travel Grant - 30th Symposium of the CIA (Collegium International Allergologicum) - Petersberg, Germany, 13- 18 September 2014.

PATENTS:

- Italian Patent for the industrial invention N. 0001420985 del 19/02/2016 “Method and Kit for in vitro diagnostics of "delayed" adverse drug reactions”. Application N. 102011901953669/FI2011A000120 submitted on June 13rd 2011 (obtained on June 2016).

(https://www.uibm.gov.it/bancadati/index.php/Single_search_link/result)

SCIENTIFIC PUBLICATIONS
(H index = 33; Total citations = 4727 as reported by Scopus, May 21, 2026)

1. Lemus R, Lee KM, Emma R, **Caruso M**, Wood DM. Editorial: Application of new approach methodologies in toxicological assessment of next-generation tobacco and nicotine products. Front Toxicol. 2026 May 15;8:1843194. doi: 10.3389/ftox.2026.1843194. PMID: 42221360; PMCID: PMC13218689.
2. Lopalco G, Carota G, Musso N, Di Pietro L, Privitera A, Bonacci PG, Buccarello L, Natuzzi D, Bizzoca R, Del Vescovo S, **Caruso M**, Caraci F, Vitale A, Venerito V, Iannone F, Caruso G. PPAR-γ dysregulation links NF-κB activation and Nrf2-driven antioxidant responses in axial spondyloarthritis: A pilot study. J Autoimmun. 2026 Apr 23;161:103557. doi: 10.1016/j.jaut.2026.103557. PMID: 42030776.
3. Emma R, Carota G, Partsinevelos K, Rust S, Sun A, Giordano A, Volarevic V, Lesmana R, Goenawan H, Barliana MI, Arsenijevic A, Kastratovic N, Spasic B, Giardina C, Cantali M, Pittalà A, Saab MW, Amorini AM, Polosa R, **Caruso M***, Li Volti G. Effect of electronic cigarette aerosols on cisplatin resistance in head and neck cancer cells: a collaborative replication study. BMC Cancer. 2026 Apr 22. doi: 10.1186/s12885-026-16029-8. Epub ahead of print. PMID: 42021215. ***Corresponding author***
4. Emma R, Sun A, Partsinevelos K, Rust S, Volarevic V, Lesmana R, Giordano A, Goenawan H, Barliana MI, Arsenijevic A, Kastratovic N, Markovic V, Spasic B, Distefano A, Orlando L, Carota G, Polosa R, **Caruso M***, Li Volti G. Toxicological Evaluation of Vanillin Flavor in E-Liquid Aerosols on Endothelial Cell Function: Findings from the Replica Project. Cardiovasc Toxicol. 2026 Apr 13;26(4):42. doi: 10.1007/s12012-026-10111-0. PMID: 41968178; PMCID: PMC13070984. ***Corresponding author***
5. Emma R, Distefano A, Zuccarello P, Copat C, Ferrante M, Oliveri Conti GM, Pulvirenti R, Carota G, Campagna D, Polosa R, Rust S, **Caruso M***, Li Volti G. Mechanistic toxicity profiling of nicotine-rich e-liquids: mitochondrial and oxidative stress responses in ALI-exposed bronchial cells. Mol Cell Biochem. 2026 Feb;481(2):899-910. doi: 10.1007/s11010-025-05430-9. Epub 2025 Nov 19. PMID: 41254430; PMCID: PMC12963075. ***Corresponding author***
6. Cucco A, Pearce N, Simpson A, Pembrey L, Mpairwe H, Figueiredo CA, Cooper PJ, Douwes J, Brooks C, Adcock IM, Kermani NZ, Roberts GDM, Murray CS, Custovic A, Fontanella S; WASP Study Group; STELAR/UNICORN Consortium; **U-BIOPRED Consortium***. Exploring geographic differences in IgE response through network and manifold analyses. J Allergy Clin Immunol. 2026 Jan;157(1):262-272. doi: 10.1016/j.jaci.2025.05.032. Epub 2025 Jun 30. PMID: 40602688. ***part of the U-BIOPRED Consortium***
7. Giallongo S., Bellia F., Russo A., Fallico M., Polosa R., Castellino N., Longo A., Emma R., Partsinevelos K., **Caruso M.**, Kartasasmita A.S., Sferrazzo G., Barbagallo I.A., Caltabiano R., Broggi G., Alanazi A.M., Volti G.L. Comparative Evaluation of Cigarette Smoke and a Heated Tobacco Product on Corneal Oxidative Stress in an Air/Liquid Interface Model. Investigative Ophthalmology and Visual Science, (2025), 66 (4). DOI: 10.1167/iovs.66.4.4
8. Furnari S., Emma R., **Caruso M**., Furneri P.M., Fuochi V. Evaluating the Risks of Heated Tobacco Products: Toxicological Effects on Two Selected Respiratory Bacteria and Human Lung Cells. (2025) Toxics, 13 (2), art. no. 70. DOI: 10.3390/toxics13020070
9. Meys R, Franssen FME, Van 't Hul AJ, Bakke PS, **Caruso M**, Dahlén B, Fowler SJ, Geiser T, Howarth PH, Horváth I, Krug N, Behndig AF, Singer F, Musial J, Shaw DE, Montuschi P, Zee AHM, Sterk PJ, Roberts G, Kermani NZ, Incalzi RA, Louis R, Andersson LI, Wagers SS, Dahlén SE, Chung KF, Adcock IM, Spruit MA. Clinical importance of patient-reported outcome measures in severe asthma: results from U-BIOPRED. Health Qual Life Outcomes. 2024 Dec 20;22(1):109. doi: 10.1186/s12955-024-02321-3. PubMed PMID: 39707320; PubMed Central PMCID: PMC11662558.
10. Zounemat Kermani N, Chung KF, Macis G, Santini G, Clemeno FAA, Versi A, Sun K, Abdel-Aziz MI, Andersson LI, Auffray C, Badi Y, Bakke P, Brightling C, Brinkman P, **Caruso M**, Chanez P, De Meulder B, Djukanovic R, Fabbri L, Fowler SJ, Horvath I, Howarth P, James AJ, Kolmert J, Kraft M, Li CX, Maitland-

van der Zee AH, Malerba M, Papi A, Rabe K, Sanak M, Shaw DE, Singh D, Sparreman Mikus M, van Den Berge M, Wheelock AM, Wheelock CE, Yasinska V, Guo YK, Wagers S, Barnes PJ, Bush A, Sterk PJ, Dahlen SE, Adcock IM, Siddiqui S, Montuschi P. Radiomultiomics: quantitative CT clusters of severe asthma associated with multiomics. Eur Respir J. 2024 Nov;64(5). doi: 10.1183/13993003.00207-2024. Print 2024 Nov. PubMed PMID: 39401856; PubMed Central PMCID: PMC11579543.

11. Distefano A, Orlando L, Partsinevelos K, Longhitano L, Emma R, **Caruso M**, Vicario N, Denaro S, Sun A, Giordano A, Tomasello B, Alanazi AM, Li Volti G, Amorini AM. Comparative evaluation of cigarette smoke and a heated tobacco product on microglial toxicity, oxidative stress and inflammatory response. J Transl Med. 2024 Sep 30;22(1):876. doi: 10.1186/s12967-024-05688-5. PubMed PMID: 39350202; PubMed Central PMCID: PMC11440907.

12. Distefano A, Orlando L, Giallongo S, Tropea E, Spampinato M, Santisi A, Longhitano L, Parisi G, Leonardi S, Russo A, **Caruso M**, Di Rosa M, Tibullo D, Salamone M, Li Volti G, Barbagallo IA. Fish Oil Containing Pro-Resolving Mediators Enhances the Antioxidant System and Ameliorates LPS-Induced Inflammation in Human Bronchial Epithelial Cells. Pharmaceuticals (Basel). 2024 Aug 14;17(8). doi: 10.3390/ph17081066. PubMed PMID: 39204170; PubMed Central PMCID: PMC11360764.

13. Emma R, Fuochi V, Distefano A, Partsinevelos K, Rust S, Zadjali F, Al Tobi M, Zadjali R, Alharthi Z, Pulvirenti R, Furneri PM, Polosa R, Sun A, **Caruso M***, Li Volti G; Replica Project Group. Cytotoxicity, mutagenicity and genotoxicity of electronic cigarettes emission aerosols compared to cigarette smoke: the REPLICA project. Sci Rep. 2023 Oct 30;13(1):17859. doi: 10.1038/s41598-023-44626-1. PMID: 37903810; PMCID: PMC10616076. ***Corresponding author***

14. **Caruso M**, Emma R, Distefano A, Rust S, Poulas K, Giordano A, Volarevic V, Mesiakaris K, Boffo S, Arsenijevic A, Karanasios G, Pulvirenti R, Ilic A, Canciello A, Zuccarello P, Ferrante M, Polosa R, Li Volti G. Comparative assessment of electronic nicotine delivery systems aerosol and cigarette smoke on endothelial cell migration: the Replica Project. Drug Test Anal. 2023, 15(10). doi: 10.1002/dta.3349. pp.1164-1174. PMID: 35877466.

15. Versi A, Ivan FX, Abdel-Aziz MI, Bates S, Riley J, Baribaud F, Kermani NZ, Montuschi P, Dahlen SE, Djukanovic R, Sterk P, Maitland-Van Der Zee AH, Chotirmall SH, Howarth P, Adcock IM, Chung KF; **U-BIOPRED consortium***. Haemophilus influenzae and Moraxella catarrhalis in sputum of severe asthma with inflammasome and neutrophil activation. Allergy. 2023 Nov;78(11):2906-2920. doi: 10.1111/all.15776. Epub 2023 Jun 7. PMID: 37287344. ***Part of the U-BIOPRED Consortium***

16. Yasinska V., Gómez C., Kolmert J., Ericsson M., Pohanka A., James A., Andersson L.I., Sparreman-Mikus M., Sousa A.R., Riley J.H., Bates S., Bakke P.S., Kermani N.Z., **Caruso M.**, Chanez P., Fowler S.J., Geiser T., Howarth P.H., Horváth I., Krug N., Montuschi P., Sanak M., Behndig A., Shaw D.E., Knowles R.G., Dahlén B., van der Zee A.-H.M., Sterk P.J., Djukanovic R., Adcock I.M., Chung K.F., Wheelock C.E., Dahlén S.-E., Jonsson E.W. Low levels of endogenous anabolic androgenic steroids in females with severe asthma taking corticosteroids. (2023) ERJ Open Research, 9 (5), art. no. 00269-2023, DOI: 10.1183/23120541.00269-2023

17. Pavlovic D., Miloradovic D., Stojanovic M.D., Harrell C.R., Polosa R., Rust S., Volti G.L., **Caruso M.**, Jakovljevic V., Djonov V., Volarevic V. Cigarette smoke attenuates mesenchymal stem cell-based suppression of immune cell-driven acute liver failure. (2023) Toxicology Letters, 385, pp. 12 – 20. DOI: 10.1016/j.toxlet.2023.08.006

18. Abdel-Aziz M.I., Thorsen J., Hashimoto S., Vijverberg S.J.H., Neerincx A.H., Brinkman P., Van Aalderen W., Stokholm J., Rasmussen M.A., Roggenbuck-Wedemeye M., Vissing N.H., Mortensen M.S., Brejnrod A.D., Fleming L.J., Murray C.S., Fowler S.J., Frey U., Bush A., Singer F., Hedlin G., Nordlund B., Shaw D.E., Chung K.F., Adcock I.M., Djukanovic R., Auffray C., Bansal A.T., Sousa A.R., Wagers S.S., Chawes B.L., Bønnelykke K., Sørensen S.J., Kraneveld A.D., Sterk P.J., Roberts G., Bisgaard H., Maitland-Van Der Zee A.H., Kolmert J., James A., Sousa A.R., Riley J.H., Bates S., Bakke P.S., **Caruso M.**, Chanez P., Fowler S.J., Geiser T., Howarth P., Horvath I., Krug N., Montuschi P., Sanak M., Behndig A., Shaw D.E., Knowles R.G., Holweg C.T.J., Wheelock A.M., Dahlen B., Alving K., Chung K.F., Dahlen S.-E., Wheelock C.E., Andersson L., De Meulder B., Lutter R., Mumby S., Roberts G., Uddin M., Wagers S.S., Kermani N.Z. Oropharyngeal Microbiota Clusters in Children with Asthma or Wheeze Associate with Allergy, Blood Transcriptomic Immune Pathways, and Exacerbation Risk. (2023) American Journal of Respiratory and Critical Care Medicine, 208 (2), pp. 142 – 154. DOI: 10.1164/rccm.202211-2107OC

19. Hou, R., Ye, G., Cheng, X., Shaw, D.E., Bakke, P.S., **Caruso, M.**, Dahlen, B., Dahlen, S.-E., Fowler, S.J., Horváth, I., Howarth, P., Krug, N., Montuschi, P., Sanak, M., Sandström, T., Auffray, C., De Meulder, B., Sousa, A.R., Adcock, I.M., Fan Chung, K., Sterk, P.J., Skipp, P.J., Schofield, J., Djukanović, R. The role of inflammation in anxiety and depression in the European U-BIOPRED asthma cohorts. (2023) Brain, Behavior, and Immunity, 111, pp. 249-258. DOI: 10.1016/j.bbi.2023.04.011

20. Fuochi, V., Floresta, G., Emma, R., Patamia, V., **Caruso, M.**, Zagni, C., Ronchi, F., Ronchi, C., Drago, F., Rescifina, A., Furneri, P.M. Heparan Sulfate and Enoxaparin Interact at the Interface of the Spike Protein of HCoV-229E but Not with HCoV-OC43. (2023) Viruses, 15 (3), art. no. 663. DOI: 10.3390/v15030663

21. Brandsma, J., Schofield, J.P.R., Yang, X., Strazzeri, F., Barber, C., Goss, V.M., Koster, G., Bakke, P.S., **Caruso, M.**, Chanez, P., Dahlén, S.-E., Fowler, S.J., Horváth, I., Krug, N., Montuschi, P., Sanak, M., Sandström, T., Shaw, D.E., Chung, K.F., Singer, F., Fleming, L.J., Adcock, I.M., Pandis, I., Bansal, A.T., Corfield, J., Sousa, A.R., Sterk, P.J., Sánchez-García, R.J., Skipp, P.J., Postle, A.D., Djukanović, R., the U-BIOPRED Study Group. Stratification of asthma by lipidomic profiling of induced sputum supernatant. (2023) Journal of Allergy and Clinical Immunology. DOI: 10.1016/j.jaci.2023.02.032

22. Caponnetto, P., Campagna, D., Maglia, M., Benfatto, F., Emma, R., **Caruso, M.**, Caci, G., Busà, B., Pennisi, A., Ceracchi, M., Migliore, M., Signorelli, M. Comparing the Effectiveness, Tolerability, and Acceptability of Heated Tobacco Products and Refillable Electronic Cigarettes for Cigarette Substitution (CEASEFIRE): Randomized Controlled Trial (2023) JMIR Public Health and Surveillance, 9, art. no. e42628. DOI: 10.2196/42628

23. Longhitano L, Vicario N, Forte S, Giallongo C, Broggi G, Caltabiano R, Barbagallo GMV, Altieri R, Raciti G, Di Rosa M, **Caruso M**, Parenti R, Liso A, Busi F, Lolicato M, Mione MC, Li Volti G, Tibullo D. Lactate modulates microglia polarization via IGFBP6 expression and remodels tumor microenvironment in glioblastoma. Cancer Immunol Immunother. 2023 Jan;72(1):1-20. doi: 10.1007/s00262-022-03215-3. Epub 2022 Jun 3. Erratum in: Cancer Immunol Immunother. 2022 Jul 12;: PMID: 35654889; PMCID: PMC9813126.

24. Emma R[*], **Caruso M**[*], Campagna D, Pulvirenti R, Li Volti G. The Impact of Tobacco Cigarettes, Vaping Products and Tobacco Heating Products on Oxidative Stress. Antioxidants (Basel). 2022 Sep 16;11(9):1829. doi: 10.3390/antiox11091829. PMID: 36139904; PMCID: PMC9495690.***Co-first author***

25. Brandsma J, Schofield JPR, Yang X, Strazzeri F, Barber C, Goss VM, Koster G, Bakke PS, **Caruso M**, Chanez P, Dahlén SE, Fowler SJ, Horváth I, Krug N, Montuschi P, Sanak M, Sandström T, Shaw DE, Chung KF, Singer F, Fleming LJ, Adcock IM, Pandis I, Bansal AT, Corfield J, Sousa AR, Sterk PJ, Sánchez-García RJ, Skipp PJ, Postle AD, Djukanović R; U-BIOPRED Study Group. Stratification of asthma by lipidomic profiling of induced sputum supernatant. J Allergy Clin Immunol. 2023 Mar 12:S0091-6749(23)00293-2. doi: 10.1016/j.jaci.2023.02.032. Epub ahead of print. PMID: 36918039.

26. Hoda U, Pavlidis S, Bansal AT, Takahashi K, Hu S, Ng Kee Kwong F, Rossios C, Sun K, Bhavsar P, Loza M, Baribaud F, Chanez P, Fowler SJ, Horvath I, Montuschi P, Singer F, Musial J, Dahlen B, Krug N, Sandstrom T, Shaw DE, Lutter R, Fleming LJ, Howarth PH, **Caruso M**, Sousa AR, Corfield J, Auffray C, De Meulder B, Lefaudeux D, Dahlen SE, Djukanovic R, Sterk PJ, Guo Y, Adcock IM, Chung KF; U-BIOPRED study group. Clinical and transcriptomic features of persistent exacerbation-prone severe asthma in U-BIOPRED cohort. Clin Transl Med. 2022 Apr;12(4):e816. doi: 10.1002/ctm2.816. PMID: 35474304; PMCID: PMC9043117.

27. Maglia M, Quattropani MC, Polosa R, Panassidi A, **Caruso M**, Mangione M, Nicolosi V, Mazzeppi SD, Lenzo V, Sardella A, Caponnetto P. Qualitative study on the perception of combustible cigarettes, e-cigarettes and heated tobacco cigarettes among pregnant women. J Addict Dis. 2023 Mar 9:1-11. doi: 10.1080/10550887.2023.2184302. Epub ahead of print. PMID: 36892131.

28. Hajat, C., Stein, E., Selya, A., Polosa, R., Alaimo, S., Anfuso, C.D., Barbagallo, I., Basile, F., Battiato, S., Benhamou, B., Bertino, G., Bianchi, A., Biondi, A.G., Brandi, M.L., Cacciola, E., Cacciola, R.R., Cacopardo, B.S., Calogero, A.E., Cambria, M.T., Campagna, D., Caraci, F., Cariola, A., **Caruso, M.**, Caponnetto, P., Ciancio, A., Cibella, F., Mauro, M., Piazza, J., Stefano, A., Drago, F., Failla, S., Faraci, R., Ferlito, S., Ferrante, M., Ferro, A., Ferro, G.A., Frasca, F., Frittitta, L., Furneri, P.M., Gagliano, A., Gallo, G., Galvano, F., Grasso, G., Guarino, F., Gulino, A., Jannini, E.A., Vignera, S.L., Lazzarino, G., Ledda, C., Leonardi, R.M., Volti, G.L., Longo, A., Lupo, G., Malerba, M., Marletta, L., Nicolosi, G., Nocera, F., Conti, G.O., Palazzo, G., Parenti, R., Pedullà, E., Pulvirenti, A., Purrello, F., Rapisarda, F., Rapisarda, V., Rizzo, R., Ronsisvalle, S., Ronsisvalle, G., Ruggieri, M., Santagati, M.C., Satriano, C., Sciacca, L., Signorelli, M.S., Tatullo, M., Tibullo, D., Tomaselli, V., Volarevic, V., Zanoli, L., Zappalà, A., The CoEHAR study group. Analysis of common methodological flaws in the highest cited e-cigarette epidemiology research. (2022) Internal and Emergency Medicine, 17 (3), pp. 887-909. DOI: 10.1007/s11739-022-02967-1

29. Tiotiu, A., Badi, Y., Kermani, N.Z., Sanak, M., Kolmert, J., Wheelock, C.E., Hansbro, P.M., Dahlén, S.-E., Sterk, P.J., Djukanovic, R., Guo, Y., Mumby, S., Adcock, I.M., Chung, K.F., Hoda, U., Rossios, C., Bel, E., Rao, N., Myles, D., Compton, C., Van Geest, M., Howarth, P., Roberts, G., Lefaudeux, D., De Meulder, B., Bansal, A.T., Knowles, R., Erzen, D., Wagers, S., Krug, N., Higenbottam, T., Matthews, J., Erpenbeek, V., Carayannopoulos, L., Roberts, A., Supple, D., deBoer, P., **Caruso, M.**, Chanez, P., Horváth, I., Musial, J., Sandström, T., U-BIOPRED Consortium Project Team

Association of Differential Mast Cell Activation with Granulocytic Inflammation in Severe Asthma (2022) American Journal of Respiratory and Critical Care Medicine, 205 (4), pp. 397-411. DOI: 10.1164/rccm.202102-0355OC

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SCIENTIFIC CONGRESSES

1. Speaker: Building Bridges in Tobacco Harm Reduction: A Global Interlaboratory Initiative for Standardized Smoke and Aerosol Exposure Assessment. Caruso M. CORESTA PSPT2025 CONFERENCE - Annecy, France - 19-23 October 2025

2. Scientific Poster: Building Bridges in Tobacco Harm Reduction: A Global Interlaboratory Initiative for Standardized Smoke and Aerosol Exposure Assessment. Caruso M. EUROTOX Conference. Athens, Greece, 14-17 September 2025
3. Speaker: Building Bridges in Tobacco Harm Reduction: A Global Interlaboratory Initiative for Standardized Smoke and Aerosol Exposure Assessment. Caruso M. EUROTOX Conference. Athens, Greece, 14-17 September 2025
4. Scientific Poster: Toxicity induced by cigarette smoke and electronic cigarette aerosols. Konstantinos Partsinevelos, Rosalia Emma, Alfio Distefano, Giuseppe Carota, Sonja Rust, Roberta Pulvirenti, Davide Campagna, Riccardo Polosa, Massimo Caruso, and Giovanni Li Volti. 8-11 Settembre 2024. EUROTOX Conference 2024. Copenaghen (DK)
5. Speaker: Cytotoxicity evaluation of vanillin in electronic cigarette liquids on human aortic artery endothelial cells. Caruso M. CORESTA SSPT2023 Conference SMOKE SCIENCE and PRODUCT TECHNOLOGY. Cancun, Mexico, 7-12 October 2023
6. Speaker: In Vitro mutagenicity potential of a Pod-Based E-Cigarette Aerosol Compared to Cigarette Smoke: the REPLICA PROJECT. Caruso M. RESEARCH TRACK SESSION IV. "5th Scientific Summit on Tobacco Harm Reduction: Novel Products, Research & Policy". 21-22 September, 2022.
7. Speaker: Comparative assessment of electronic nicotine delivery systems aerosol and cigarette smoke on endothelial cell migration: the REPLICA PROJECT. Caruso M. RESEARCH TRACK SESSION IV. "5th Scientific Summit on Tobacco Harm Reduction: Novel Products, Research & Policy". 21-22 September, 2022.
8. Invited speaker: Electronic nicotine delivery systems exhibit lower toxicity compared to cigarettes. the "REPLICA STUDY GROUP" experience. Caruso M. Thematic category: Toxicology and aerosol chemistry. "4th Scientific Summit on Tobacco Harm Reduction: Novel Products, Research & Policy". 29-30 Settembre, 2021.
9. Oral communication: What is the best approach to assess the vapor-induced cytotoxicity of ENDS? A road map to the destination. Caruso M. Cooperation Centre for Scientific Research Relative to Tobacco (CORESTA) "Smoke-Techno Conference 2021" (Virtual Conference). 18 - 28 Ottobre, 2021
10. Replica Project - Interview: G. Li Volti and M. Caruso - 8th Global Forum on Nicotine 2021 (GFN 2021); Liverpool, 17-18 June 2021 - GFN Fives - Science and innovation section
11. Oral communication: Electronic cigarette liquids inhibit pathogenic bacteria growth in vitro. 6th Global Forum on Nicotine. 17-20 June 2019. Warsaw.
12. Oral communication: Safety and Efficacy Of Subcutaneous Pollen Immunotherapy Administered By Needleless Device In Allergic Rhinitis Adults. Annual Congress of European Academy of Allergy and Clinical Immunology (EAACI). Munich. May 2018.
13. Invited Speaker: Test di attivazione in vitro nel laboratorio di allergologia. 14° Congresso Regionale SiBioc - Sezione Sicilia. "Innovazione in Medicina di Laboratorio". Cefalù - 6 Ottobre 2017
14. Invited Speaker: Nuovi sviluppi in Immunoterapia senza ago. Evento: Meeting scientifico: "La grande sfida". Sponsorizzato da Bial Aristegui Italia. ROMA 06 Ottobre 2016 - MILANO 07 Ottobre 2016.
15. Oral communication: Could Basophil Activation Tests (BATs) have a role in diagnosis of Food Allergies? 10th EuroBAT Meeting - The European Consortium on Application of Flow Cytometry in Allergy; Session: Food Allergy. Rome (Italy) - 12 October 2016
16. Chair: Miscellaneous drug allergy Poster Session - Annual Congress of European Academy of Allergy and Clinical Immunology (EAACI). Barcellona (Spagna) – 8 Giugno 2015
17. Oral communication: Anaphylaxis to Local Anesthetics: an integrated approach clinical-laboratory. Congress of EAACI 2015 (European Academy of Allergy and Clinical Immunology). Barcelona (Spain) 6-10 June 2015.
18. Oral communication: Investigating the Delayed Adverse Reactions to Non-Steroidal Anti-Inflammatory Drugs by an ex-vivo Stimulation Test. A new safety approach to support the drug allergy diagnosis. Collegium Internationale Allergologicum in Petersberg, Germany, 13-18 September 2014
19. Oral communication: Usefulness of basophil activation markers in the diagnosis of drug hypersensitive reaction to amoxicillin. 8th EuroBAT Meeting - The European Consortium on Application of Flow Cytometry in Allergy. Session: Drugs allergy/mixed topics - Munich, Germany. 12/13 December 2014

20. Invited Speaker: Orticaria cronica autoimmune: un approccio citofluorimetrico come supporto alla diagnosi ed all'inquadramento clinico e terapeutico. Relazione su invito. 10° Congresso Regionale SiBioc - Sezione Sicilia. "Dalla Ricerca Biomedica Alla Medicina Di Laboratorio". Caltanissetta - 25 Settembre 2013
21. Oral communication: Evaluation of drug hypersensitivity: The clinical laboratory as valuable help to make a correct diagnosis. Caruso M – 42° National Congress of Italian Society of Clinical Biochemistry and Molecular Biology (SIBioC) – Rome. 5–8 October 2010.
22. Invited Speaker: Flow2- CAST - Test di citometria a flusso nella diagnosi di allergie. Caruso M. Congresso Nazionale AIPaCMeM (Associazione Italiana di Patologia Clinica e Medicina Molecolare) - Tivoli (Roma) – 12-15 maggio 2009
23. Oral communication: Le lipoproteine a bassa densità ossidate stimolano la migrazione e l'attivazione degli eosinofili. Caruso M, Mastruzzo C, Lupo G, La Rosa C, Pistorio MP, Anfuso CD, Gili E, Trovato Salinaro E, Crimi N, Alberghina M, Vancheri C. Atti del 3° Congresso Nazionale S.I.Ci.C.S. – Palermo, 13-15 Aprile 2005.

SCIENTIFIC SEMINARS

1. "REPLICA: independent validation of THR studies". 2025 Asia-Pacific conference on smoking and Harm reduction. June 14, 2025. Bandung, Indonesia.
2. The "REPLICA" project: addressing the replication crisis in tobacco harm reduction studies. Center for Biotechnology/Sbarro Institute. Temple University. Hosts: Dr. A. Giordano, Dr. A. Sun. May 2, 2023.
3. The "Replica Study Group" experience: working, harmonizing, facing challenges and growing all together. Center for Biotechnology/Sbarro Institute. Temple University. Philadelphia (USA). Hosts: Dr. A. Giordano, Dr. A. Sun. April 5, 2022.
4. The "REPLICA" project. Towards the standardization and harmonization of experimental protocols in an international consortium. College of Medicine and Health Sciences, Department of Clinical Biochemistry, Sultan Qaboos University. Khodh (Oman). Host: Dr. F. Zadijali. February 24, 2020.
5. The "REPLICA" project. Towards the standardization and harmonization of experimental protocols in an international consortium Department of Microbiology and Immunology, Faculty of Medical Sciences, University of Kragujevac (Serbia). Host: Dr. V. Volarevic. February 22, 2020.
6. The "REPLICA" project. Towards the standardization and harmonization of experimental protocols in an international consortium. Department of Pharmacy, University of Patras, Patras (Greece). Host: Dr. K. Poulas. February 18, 2020.
7. "Flow cytometry applied to the clinical laboratory: from hematology to allergology". School of Medicine. University of Catania. June 14, 2017
8. "Technical applications of the flow cytometry in the clinical and research laboratory". Master course in Biology. University of Catania, Department of Biology. May 15, 2017.

BOOKS

Eziopatogenesi e diagnostica delle farmaco-reattività (Aetiopathogenesis and diagnostics of drug-reactivity). G. Tringali, C. De Francisci, G Pennisi, M. Caruso. Bonanno Editore, 2006. Italy.