

Curriculum vitae

Sara Negri



CONTATTI

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Nazionalità Italiana
Data di nascita [REDACTED]

PROFILO PROFESSIONALE

Esperta nello sviluppo e nella validazione di metodi analitici in UPLC e HPLC-MS/MS in matrici biologiche e ambientali

Sede lavorativa: Istituti Clinici Scientifici Maugeri di Pavia, Laboratorio di Epigenetica

Laureata in Scienze Biologiche (101/110) nel 2000.

Abilitazione alla professione nel 2001

Master in Discipline Regolatorie nel 2006

Scopus H index = 20

Professore a contratto per il corso di Tossicologia Industriale della Facoltà di Tecniche della prevenzione nell'Ambiente e nei Luoghi di lavoro dell'Università di Pavia dal 2008

Consigliere del Direttivo della Società Italiana Valori di Riferimento (SIVR) dal 2013 al 2020

Buona conoscenza della lingua Inglese scritta e parlata

RESPONSABILITA'

Responsabile linea analitica UPLC-MS (Acquity-QDa, Waters).

Correlatore di tesi per studenti di Scienze Biologiche, Farmacia e CTF

ESPERIENZE ANALITICHE

Principali metodi analitici sviluppati:

Farmaci utilizzati per la cura del COVID-19 (idrossiclorochina, azitromicina e relativi metaboliti) su sangue intero

Farmaci antiaritmici su siero per il monitoraggio terapeutico (mexiletina, flecainide, idrochinidina)

Farmaci sperimentali nanoformulati con ferritina in midium e pellet cellulari (Navitoclax e Curcumina)

Inquinanti ambientali persistenti: PFOA e PFOS su siero, in acqua di fiume, nei tessuti umani e murini, in larve di zebrafish

Determinazione di zuccheri come il sorbitolo su siero per lo studio di malattie neurodegenerative

PUBBLICAZIONI:

1. Coccini T, Schicchi A, Locatelli CA, Caloni F, Negri S, Grignani E, De Simone U.
Methylglyoxal-induced neurotoxic effects in primary neuronal-like cells transdifferentiated from human mesenchymal stem cells: Impact of low concentrations.
J Appl Toxicol. 2023 Dec;43(12):1819-1839. doi: 10.1002/jat.4515. Epub 2023 Jul 10.
2. Gagliardi S, Truffi M, Tinelli V, Garofalo M, Pandini C, Cotta Ramusino M, Perini G, Costa A, Negri S, Mazzucchelli S, Bonizzi A, Sitia L, Busacca M, Sevieri M, Mocchi M, Ricciardi A, Prosperi D, Corsi F, Cereda C, Morasso C.
Bisdemethoxycurcumin (BDC)-Loaded H-Ferritin-Nanocages Mediate the Regulation of Inflammation in Alzheimer's Disease Patients.
Int J Mol Sci. 2022 Aug 17;23(16):9237. doi: 10.3390/ijms23169237.
3. Grosz BR, Stevanovski I, Negri S, Ellis M, Barnes S, Reddel S, Vucic S, Nicholson GA, Cortese A, Kumar KR, Deveson IW, Kennerson ML.
Long read sequencing overcomes challenges in the diagnosis of SORD neuropathy. J Peripher Nerv Syst. 2022 Feb 28. Online ahead of print.
4. Sottani C, Grignani E, Cornacchia M, Negri S, Cuna FSRD, Cottica D, Bruzzese D, Severi P, Strocchi D, Verna G, Leso V, Iavicoli I.
Occupational Exposure Assessment to Antineoplastic Drugs in Nine Italian Hospital Centers over a 5-Year Survey Program.
Int J Environ Res Public Health. 2022 Jul 14;19(14):8601. doi: 10.3390/ijerph19148601.
5. Sitia L, Bonizzi A, Mazzucchelli S, Negri S, Sottani C, Grignani E, Rizzuto MA, Prosperi D, Sorrentino L, Morasso C, Allevi R, Sevieri M, Silva F, Truffi M, Corsi F.
Selective Targeting of Cancer-Associated Fibroblasts by Engineered H-Ferritin Nanocages Loaded with Navitoclax. Cells. 2021 Feb 5;10(2):328.
6. Mazzanti A, Briani M, Kukavica D, Bulian F, Marelli S, Trancuccio A, Monteforte N, Manciuoli T, Morini M, Carlucci A, Viggiani G, Cannata F, Negri S, Bloise R, Memmi M, Gambelli P, Carbone A, Molteni M, Bianchini R, Salgarello R, Sozzi S, De Cata P, Fanfulla F, Ceriana P, Locatelli C, Napolitano C, Chiovato L, Tomasi L, Stefanini G, Condorelli G, Priori SG.
Association of Hydroxychloroquine with QTc Interval in Patients with COVID-19. Circulation. 2020 Jun 5.
7. Cortese A, Zhu Y, Rebelo AP, Negri S, Courel S, Abreu L, Bacon CJ, Bai Y, Bis-Brewer DM, Bugiardini E, Buglo E, Danzi MC, Feely SME, Athanasiou-Fragkouli A, Haridy NA; Inherited Neuropathy Consortium, Isasi R, Khan A, Laurà M, Magri S, Pipis M, Pisciotta C, Powell E, Rossor AM, Saveri P, Sowden JE, Tozza S, Vandrovcova J, Dallman J, Grignani E, Marchioni E, Scherer SS, Tang B, Lin Z, Al-Ajmi A, Schüle R, Synofzik M, Maisonobe T, Stojkovic T, Auer-Grumbach M, Abdelhamed MA, Hamed SA, Zhang R, Manganelli F, Santoro L, Taroni F, Pareyson D, Houlden H, Herrmann DN, Reilly MM, Shy ME, Zhai RG, Zuchner S.
Biallelic mutations in SORD cause a common and potentially treatable hereditary neuropathy with implications for diabetes. Nat Genet. 2020 May;52(5):473-481.
8. Bonizzi A, Truffi M, Sevieri M, Allevi R, Sitia L, Ottria R, Sorrentino L, Sottani C, Negri S, Grignani E, Mazzucchelli S, Corsi F.
Everolimus Nanoformulation in Biological Nanoparticles Increases Drug Responsiveness in Resistant and Low-Responsive Breast Cancer Cell Lines. Pharmaceutics. 2019 Aug 2;11(8).
9. Perteghella S, Sottani C, Coccè V, Negri S, Cavicchini L, Alessandri G, Cottica D, Torre ML, Grignani E, Pessina A.
Paclitaxel-Loaded Silk Fibroin Nanoparticles: Method Validation by UHPLC-MS/MS to Assess an Exogenous Approach to Load Cytotoxic Drugs. Pharmaceutics. 2019 Jun 17;11(6).

10. Negri S, Oddone E, Morandi F, Sottani C, Gardinali F, Lillo A, Pastoris O, Dacrema V, Losurdo A, Grignani E, Cottica D, Imbriani M. Validation of cleaning procedures used in an Italian Hospital Pharmacy for antineoplastic drug decontamination: a new tool for industrial hygiene. *Med Lav*. 2019 Apr 19;110(2):93-101.
11. Aprea MC, Apostoli P, Bettinelli M, Lovreglio P, Negri S, Perbellini L, Perico A, Ricossa MC, Salamon F, Scapellato ML, Iavicoli I. Urinary levels of metal elements in the non-smoking general population in Italy: SIVR study 2012-2015. *Toxicol Lett*. 2018 Dec 1;298:177-185. doi: 10.1016/j.toxlet.2018.07.004. Epub 2018 Jul 9.
12. Sottani C, Grignani E, Zaratini L, Santorelli D, Studioso E, Lonati D, Locatelli CA, Pastoris O, Negri S, Cottica D. A new, sensitive and versatile assay for quantitative determination of α -fluoro- β -alanine (AFBA) in human urine by using the reversed-phase ultrahigh performance-tandem mass spectrometry (rp-UHPLC-MS/MS) system. *Toxicol Lett*. 2018 Dec 1;298:164-170. doi: 10.1016/j.toxlet.2018.10.007. Epub 2018 Oct 10.
13. Sottani C, Grignani E, Oddone E, Dezza B, Negri S, Villani S, Cottica D. Monitoring Surface Contamination by Antineoplastic Drugs in Italian Hospitals: Performance-Based Hygienic Guidance Values (HGVs) Project. *Annals of Work Exposures and Health*, 2017, 1–9.
14. Aprea MC, Scapellato ML, Valsania MC, Perico A, Perbellini L, Ricossa MC, Pradella M, Negri S, Iavicoli I, Lovreglio P, Salamon F, Bettinelli M, Apostoli P. Methodology to define biological reference values in the environmental and occupational fields: the contribution of the Italian Society for Reference Values (SIVR). *Med Lav*. 2017 Apr 21;108(2):138-148.
15. Oddone E, Negri S, Morandi F, Imbriani M. Pharmaceutical Industries Air Quality. In: De La Guardia M, Armenta S (Editors) *The Quality of Air, Comprehensive Analytical Chemistry*. 2016:589-621.
16. Oddone E, Negri S, Bellinzona M, Martino S, Di Tuccio M, Grignani E, Cottica D, Imbriani M. Determination of Glucocorticoids in UPLC-MS in Environmental Samples from an Occupational Setting. *Int J Anal Chem*. 2015;2015:678579.
17. Coperchini F, Pignatti P, Lacerenza S, Negri S, Sideri R, Testoni C, de Martinis L, Cottica D, Magri F, Imbriani M, Rotondi M, Chiovato L. Exposure to perfluorinated compounds: in vitro study on thyroid cells. *Environ Sci Pollut Res Int*. 2015 Feb;22(3):2287-94.
18. Sedej S, Schmidt A, Denegri M, Walther S, Matovina M, Arnstein G, Gutsch EM, Windhager I, Ljubojević S, Negri S, Heinzel FR, Bisping E, Vos MA, Napolitano C, Priori SG, Kocksämper J, Pieske B. Subclinical abnormalities in sarcoplasmic reticulum Ca(2+) release promote eccentric myocardial remodeling and pump failure death in response to pressure overload. *J Am Coll Cardiol*. 2014 Apr 22;63(15):1569-79.
19. Lagorio S, Ferrante D, Ranucci A, Negri S, Sacco P, Rondelli R, Cannizzaro S, Torregrossa MV, Cocco P, Forastiere F, Miligi L, Bisanti L, Magnani C. Exposure to benzene and childhood leukaemia: a pilot case-control study. *BMJ Open*. 2013 Feb 26;3(2).
20. Pignatti P, Frossi B, Pala G, Negri S, Oman H, Perfetti L, Pucillo C, Imbriani M, Moscato G. Oxidative activity of ammonium persulfate salt on mast cells and basophils: implication in hairdressers' asthma. *Int Arch Allergy Immunol*. 2013;160(4):409-19.
21. Onishchenko N, Fischer C, Wan Ibrahim WN, Negri S, Spulber S, Cottica D, Ceccatelli S. Prenatal exposure to PFOS or PFOA alters motor function in mice in a sex-related manner. *Neurotox Res*. 2011 Apr;19(3):452-61.

22. Liu N, Denegri M, Ruan Y, Avelino-Cruz JE, Perissi A, Negri S, Napolitano C, Coetzee WA, Boyden PA, Priori SG. Short communication: flecainide exerts an antiarrhythmic effect in a mouse model of catecholaminergic polymorphic ventricular tachycardia by increasing the threshold for triggered activity. *Circ Res*. 2011 Jul 22;109(3):291-5.
23. Hantson P, Villa A, Galloy AC, Negri S, Esabon G, Lambiotte F, Haufroid V, Garnier R. Dimethylformamide metabolism following self-harm using a veterinary euthanasia product. *Clin Toxicol (Phila)*. 2010 Aug;48(7):725-9.
24. Pirali B, Negri S, Chytiris S, Perissi A, Villani L, La Manna L, Cottica D, Ferrari M, Imbriani M, Rotondi M, Chiovato L. Perfluorooctane sulfonate and perfluorooctanoic acid in surgical thyroid specimens of patients with thyroid diseases. *Thyroid*. 2009 Dec;19(12):1407-12.
25. Hoet P, Erika De Smedt E, Ferrari M, Maestri L, Negri S, Imbriani M, De Wilde P, Lison D, Haufroid V. Evaluation Of Urinary Biomarkers Of Exposure To Benzene: Correlation With blood benzene And Influence Of Confounding Factors. *Int Arch Occup Environ Health*. 2009 Aug;82(8):985-95.
26. Negri S, Maestri L, Esabon G, Ferrari M, Zadra P, Ghittori S, Imbriani M, Caratteristiche, uso e tossicità dei fluorurati: revisione della letteratura. *G Ital Med Lav Ergon*. 2008; 30(1):61-74 Review. Italian.
27. Ferrari M, Negri S, Zadra P, Ghittori S, Imbriani M. Saliva as an analytical tool to measure occupational exposure to toluene. *Int Arch Occup Environ Health*. 2008 Aug;81(8):1021-8. Epub 2008 Jan 3.
28. Maestri L, Negri S, Ferrari M, Ghittori S, Fabris F, Danesino P, Imbriani M. Determination of perfluorooctanoic acid and perfluorooctanesulfonate in human tissues by liquid chromatography/single quadrupole mass spectrometry. *Rapid Commun Mass Spectrom*. 2006;20(18):2728-34.
29. Liu N, Colombi B, Memmi M, Zissimopoulos S, Rizzi N, Negri S, Imbriani M, Napolitano C, Lai FA, Priori SG. Arrhythmogenesis in catecholaminergic polymorphic ventricular tachycardia: insights from a RyR2 R4496C knock-in mouse model. *Circ Res*. 2006 Aug 4;99(3):292-8.
30. Ghittori S, Ferrari M, Negri S, Serranti P, Sacco P, Biffi R, Imbriani M. Recent prevention strategies and occupational risk analysis: Control Banding and Sobane G *Ital Med Lav Ergon*. 2006 Jan-Mar;28(1):30-43. Review. Italian.
31. Ghittori S, Ferrari M, Maestri L, Negri S, Zadra P, Gremita C, Imbriani M. The significance of environmental and biological monitoring in workers employed in service stations after the elimination of tetraethyl lead from gasoline. *G Ital Med Lav Ergon*. 2005 Apr-Jun;27(2):137-53.
32. Maestri L, Negri S, Ferrari M, Ghittori S, Imbriani M. Determination of urinary S-phenylmercapturic acid, a specific metabolite of benzene, by liquid chromatography/single quadrupole mass spectrometry. *Rapid Commun Mass Spectrom*. 2005;19(9):1139-44.
33. Negri S, Bono R, Maestri L, Ghittori S, Imbriani M. High pressure liquid chromatographic - mass spectrometric determination of sorbic acid in urine: verification of formation of trans,trans-muconic acid. *Chemico-Biological Interaction*, 2005;153-154:243-6.
34. Negri S, Maestri L, Andreoli R, Manini P, Mutti A, Ghittori S. Mercapturic acids of styrene in man: comparability of the results obtained by LC/MS/MS and by HPLC-fluorimeter, and stability of samples under different storage conditions. *Toxicol Lett*. 2006 Apr 10;162(2-3):225-33.
35. Negri S, Ferrari M, Maestri L, Ghittori S, Imbriani M. Excretion kinetics of phenylhydroxyethyl mercapturic acids (PHEMAs), ethanol consumption, and chronic exposure to styrene: preliminary data on humans. *G Ital Med Lav*, 2004 ;26:208-22.

36. Apostoli P, Bergonzi R, Catalani S, Neri G, Sarnico M, Foa V, Fustinoni S, Colombi A, Buratti M, Campo L, Scibetta L, Sannolo N, Pieri M, Basile A, Bartolucci GB, Carrieri M, Scapellato ML, Manini P, Poli D, Corradi M, Andreoli R, Goldoni M, Mutti A, Imbriani M, Ghittori S, Maestri L, Negri S, Pira E, Pavan I, Discalzi G, Perbellini L.
New biomarkers of exposure. *G Ital Med Lav*, 2004 ;26:278-97. Review.
37. Ghittori S, Alessio A, Negri S, Maestri L, Zadra P, Imbriani M.
A field method for sampling toluene in end-exhaled air, as a biomarker of occupational exposure: correlation with other exposure indices. *Ind Health*, 2004, 42:226-34.
38. Alessio A, Zadra P, Negri S, Maestri L, Imberti R, Ghittori S, Imbriani M, Cavalleri A.
Biological monitoring of occupational exposure to desflurane. *G Ital Med Lav*, 2003; 25:137-41.
39. Marena C, Lodola L, Marone Bianco A, Maestri L, Alessio A, Negri S, Zambianchi L.
Monitoraggio delle concentrazioni aerodisperse di aldeidi durante l'utilizzo di orto-ftalaldeide e glutaraldeide per l'alta disinfezione degli endoscopi. *G Ital Med Lav Ergon*. 2003 Apr-Jun;25(2):131-6.
40. Imbriani M, Maestri L, Marracini P, Saretto G, Alessio A, Negri S, Ghittori S.
Urinary determination of N-acetyl-S-(N-methylcarbamoyl)cysteine and N-methylformamide in workers exposed to N,N-dimethylformamide. *Int Arch Occup Environ Health*, 2002, 75:445-52.
41. S. Ghittori, A. Alessio, L. Maestri, S. Negri, M. Sgroi, P. Zadra.
Schede informative per il monitoraggio biologico. *G. Ital. Med. Lav. Ergon*, vol. XXIV – Suppl. 3; luglio/settembre 2002
42. Imbriani M, Negri S, Ghittori S, Maestri L.
Measurement of urinary N-acetyl-S-(N-methylcarbamoyl)-cysteine (AMCC) by high-performance liquid chromatography with direct UV detection. *Journal of Chromatography B*, 2002, 778: 231-6.
43. Negri S, Alessio A, Maestri L, Ghittori S, Imbriani M.
Uso della cromatografia liquida ad alte prestazioni (HPLC) con rivelatore UV per il dosaggio dell' N-acetil-S-(N-metilcarbamoyl)cisteina (AMCC). *Giornale Italiano di Medicina del Lavoro*, 2001, 23: 461-6.
44. Imbriani M, Zadra P, Negri S, Alessio A, Maestri L, Ghittori S.
Monitoraggio biologico dell'esposizione professionale a sevoflurane. *La Medicina del Lavoro*, 2001, 92: 173-180.
45. Imbriani M, Niu Q, Negri S, Ghittori S. Trichloroethylene in urine as biological exposure index. *Industrial Health*, 2001, 39: 225-230.
46. Imbriani M, Maestri L, Negri S, Ghittori S
Mercapturic acids in urine as a biomarker of environmental styrene exposure. In: Mercapturic Acids as Biomarkers of Exposure to Industrial Chemicals. Ambrosi L, Soleo L, Ghittori S, Maestri L, Imbriani M, (Editors) *Advances in Occupational Medicine*; Vol 2, 2000. Maugeri Foundation Books. PI-ME Press, Pavia, Italy.

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Data 10/1/2024

Firma

