

CURRICULUM VITAE

Stefania Pasqua Mariggì

Laboratory of 'Lysophospholipid Signalling for the Development of new Therapeutic Strategies'
Institute of Biochemistry and Cell Biology (IBBC) - National Research Council (CNR), Naples
Department of Biomedical Sciences

stefania.mariggio@cnr.it, stefania.mariggio@ibbc.cnr.it

Education

4 April 2014

PhD, Department of Basic and Applied Medical Sciences, 'G. d'Annunzio' University of Chieti-Pescara. Thesis: "Metabolism and biological activities of the glycerophosphoinositols, the phosphoinositide-specific phospholipase A₂ derivatives, during the immune response". Supervisors: Dr. Daniela Corda (CNR, Napoli), Prof. Giorgio Fanò (University of Chieti-Pescara).

3 August 2001

PhD with the Open University (UK) at the Consorzio Mario Negri Sud (CMNS), Lanciano (CH). Thesis: "Regulation of immune receptor functional responses by G protein-coupled receptor kinases (GRKs) and arrestins". Supervisors: Dr. Antonio De Blasi (CMNS, Lanciano, CH), Dr. Chris Marshall (CRC Centre for Cell and Molecular Biology, London).

1 Oct 1996 - 30 Sep 1999

Professional course in the framework of the Special Projects in Applied Scientific Research (Formez-Stralcio 2D, Italian MURST). Project: "Regulation of receptors involved in the chemotaxis of immunocompetent cells". Supervisor: Dr. Antonio De Blasi (CMNS, Lanciano, CH).

1 Dec 1994 - 30 Nov 1999

Fellowship in the laboratory of Molecular Biology and Pharmacology of Receptors, directed by Dr. Antonio De Blasi, at CMNS, Lanciano, CH.

5 Mar - 26 Jun 1996

Certificate in Life Sciences as: "Expert in Research Methodologies", CMNS, Lanciano, CH.

16 Jan - 9 Aug 1995

Certificate in Life Sciences as: "Expert in Pharmacological Technology and Advanced Biomedicine in Pharmaceutical and Agroalimentary Research", CMNS, Lanciano, CH.

April 1995

Diploma: Pharmaceutical Specialisation, University of Perugia.

11 March 1994 First Degree in Pharmaceutical Chemistry at University of Perugia. Graduated with the highest grade: 110/110 cum laude.

Professional Experience

1 Jan 2023 up to date Senior Staff Researcher (Ricercatore CNR II livello), Institute of Biochemistry and Cell Biology (IBBC) - Italian National Research Council (CNR), Naples.

6 - 27 Nov 2017 Visiting Researcher, Laboratory of Prof. Barbara Balestrieri, Brigham and Women's Hospital, Division of Rheumatology, Immunology and Allergy, Harvard Medical School of Boston, MA USA. Program: "Osteoclastogenesis regulation by secretory phospholipase A₂ group IIA".

17 Oct 2011 - 31 Dec 2022 Staff Researcher (Ricercatore CNR III livello), Institute of Biochemistry and Cell Biology (IBBC), previously Institute of Protein Biochemistry (IBP) - CNR, Naples.

15 Oct - 23 Dec 2010 Visiting Researcher, Laboratory of Prof. Jenny E. Gumperz, Medical Microbiology and Immunology, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA. Program: "Regulation of CD1d-dependent lipid antigen presentation and T-cell activation by phosphoinositide derivatives".

1 Jul 2009 - 16 Oct 2011 Visiting Researcher at IBP - CNR, Naples.

24 Jan 2002 - 30 Jun 2009 Staff Scientist, Laboratory of Cellular and Molecular Endocrinology, directed by Dr. Daniela Corda, Department of Cell Biology and Oncology, CMNS, Lanciano (CH).

10 January 2001 Researcher, Laboratory of Cellular and Molecular Endocrinology, directed by Dr. Daniela Corda, Department of Cell Biology and Oncology, CMNS, Lanciano (CH).

1 Jan - 31 Dec 2000 Visiting Student, Laboratory of Prof. Federico Mayor, Centro de Biología Molecular "Severo Ochoa", Universidad Autónoma de Madrid, Spain. Program: "Regulatory mechanisms of G protein-coupled receptor signal transduction pathways".

21 Jul - 30 Sept 1997 Visiting Student, Laboratory of Dr. Paul Insel, Hematology-Oncology Division, University of California San Diego, CA, USA. Program: "Characterization of β -adrenergic receptor in S49 cells".

Administrative role and Project responsibility (from 2011)

- 2016 up to date** Head of the Laboratory of 'Lysophospholipid Signalling for the Development of new Therapeutic Strategies', IBBC/IBP – CNR, Naples.
- 2023-2024** Direction and coordination of activities within "Contratto di Ricerca Preclinica per Enti o Istituti di Ricerca" signed between Dompé farmaceutici S.p.A. and IBBC-CNR. Financial support 27 k€.
- 2023 - 2025** Head of a Research Unit within the "Fondo ordinario per gli enti e le istituzioni di ricerca" (FOE) – Invecchiamento (MIUR) in the Department of Biomedical Sciences (DBS) - CNR. Financial support 26 k€.
- 2023 - 2025** Head of a Research Unit within the PRIN 2022 PNRR (MIUR) - Prot. P2022CWSTY - Glycerophospholipid signaling at the interface between osteoclast and T cells. Financial support 117 k€.
- 2020-2022** Scientific and technical management of research activities within "Contratto di Ricerca Preclinica per Enti o Istituti di Ricerca" signed between Dompé farmaceutici S.p.A. and IBBC-CNR, Program: "C5a/C5aR₁ role in human models of osteoclastogenesis". Financial support 54 k€.
- 2019** Direction and coordination of research activities within "Contratto per l'esecuzione di Servizi Preclinici in modelli in vitro per Enti o Istituti di Ricerca" signed between Dompé farmaceutici S.p.A. and IBP-CNR. Program: Establishment of a human model of osteoclastogenesis. Financial support 27 k€.
- 2018 - 2019** Head of a Research Unit within Progetto di ricerca & Sviluppo. PO FESR 2014-2020 – Regione Campania: Sviluppo di Approcci Terapeutici INnovativi per patologie neoplastiche resistenti ai trattamenti (SATIN). Program: Preclinical evaluation of small synthetic molecules and creation of a platform for the preclinical study of new anti-neoplastic therapies. Financial support 37.5 k€.
- 2018** Direction and coordination of research activities within "Contratto per l'esecuzione di Servizi Preclinici in modelli in vitro per Enti o Istituti di Ricerca" signed between Dompé farmaceutici S.p.A. and IBP-CNR. Program: Modulation of osteoclast differentiation by C5aR antagonists (RAW264.7 cell model). Financial support 26 k€.
- 2016 - 2017** Direction and coordination of research activities within "Contratto per l'esecuzione di Servizi Preclinici in modelli in vitro per Enti o Istituti di Ricerca" signed between Dompé farmaceutici S.p.A. and IBP-CNR. Program:

“Cellular model optimisation to monitor the activity of allosteric modulators on C5aR coupling with G-proteins”. Financial support 52 k€.

2013 - 2017 Head of a Research Unit within the PRIN 2012 (MIUR) - Prot. 2012CK5RPF_005, “Development and preclinical validation of a nano-technological platform that targets the minimal residual disease (MRD) in Cancer.” Financial support 117 k€.

2012 - 2015 IBP-CNR Scientific Director within "Contratto di Ricerca" signed between Dompé farmaceutici S.p.A. and IBP-CNR. Program: “GPCRs quali bersagli molecolari nello sviluppo di nuovi farmaci per malattie rare”. Financial support 30 k€.

2011 - 2015 Head of a Research Unit within the PON01_00862 (MIUR), “An integrated technological platform for the development of new drugs for rare diseases”. Financial support 50 k€.

Teaching activities and PhD supervision

2021 Tutor of 2 trainees, IBBC-CNR, Naples.

2016 - 2021 Supervisor of 2 PhD students, IBP-CNR, Naples.

2016 - 2022 Supervisor of 1 post-doc and 5 fellowships, IBP/IBBC-CNR, Naples.

2013 - 2015 Teaching within Program PON01_00862/F9, ‘Formazione di personale altamente qualificato, orientato allo studio dei processi ed alla messa a punto di farmaci per il trattamento di patologie rare’, IBP-CNR, Naples.

2012 Teaching within the PhD program, Tigem, Naples.

2003 - 2005 Supervisor of 1 student and 1 post-doc in the framework of the Marie Curie Industry Host Fellowships, at the CMNS, Lanciano (CH).

2002 - 2004 Teaching within the training Course “Esperto in Tecniche per lo Sviluppo di Sostanze ad uso Farmacologico” MIUR, L.488/92, at CMNS, Lanciano (CH).

1996 Teaching within “Corsi teorico-pratici di Biologia Molecolare e Cellulare applicati all’Oncologia” at Consorzio CARSO, Bari.

Membership of Scientific Societies

2022 to date Member of the Signal Transduction Society (STS), Germany.

2014 to date Member of the Società Italiana di Cancerologia (SIC), and of the European Association for Cancer Research (EACR).

Invited Reviewer for Journals and Grants

- **Reviewer *ad hoc*** for 'Acta Chimica Slovenica'; 'Acta Neuropathologica Communications'; 'Cell Proliferation'; 'Drug Design, Development and Therapy'; 'Frontiers in Immunology'; Immunology; 'International Journal of Biological Macromolecules' (IJBM); 'Journal of Cellular and Molecular Medicine'; 'Journal of Oncology-Hindawi'; 'Molecular Cancer Therapeutics'; 'Neuroscience Letters'; Oncotarget; 'Plant Cell Reports'; 'Prostaglandins & Other Lipid Mediators'.
- **Guest Associate Editor** of Frontiers - Topic Editor of Frontiers in Cell and Developmental Biology, Research topic: "New Perspectives on Osteoclasts in Health and Disease".
- **Associate Editor** for Cellular Biochemistry (specialty section of Frontiers in Chemistry, Frontiers in Molecular Biosciences and Frontiers in Cell and Developmental Biology).
- **External Reviewer** in the framework of *Biological Sciences Projects - Cell and Molecular Biology* subarea - of the Portuguese Foundation for Science and Technology (FCT - Fundação para a Ciência e Tecnologia) Ministério da Ciência, Tecnologia e Ensino Superior, Lisboa Portugal.

Publications

- 38** - Madel MB, Iaccino E, Blin-Wakkach C, **Mariggìò S**[§] (2022) Editorial: New perspectives on osteoclasts in health and disease. *Front Cell Dev Biol.* 10:1093394. eBook 2022. [§]Corresponding author.
- 37** - Mangini M, D'Angelo R, Vinciguerra C, Payré C, Lambeau G, Balestrieri B, Charles JF, **Mariggìò S**[§] (2022) Multimodal regulation of the osteoclastogenesis process by secreted group IIA phospholipase A₂. *Front Cell Dev Biol.* 10:966950. [§]Corresponding author.
- 36** - Mosca MG, Mangini M, Cioffi S, Barba P, **Mariggìò S**[§] (2021) Peptide targeting of lysophosphatidylinositol-sensing GPR55 for osteoclastogenesis tuning. *Cell Commun Signal.* 19:48. doi: 10.1186/s12964-021-00727-w. [§]Corresponding author.
- 35** - D'Angelo R, Mangini M, Fonderico J, Fulle S, Mayo E, Aramini A, **Mariggìò S**[§] (2020) Inhibition of osteoclast activity by complement regulation with DF3016A, a novel small-molecular-weight C5aR inhibitor. *Biomed Pharmacother.* 123:109764. doi: 10.1016/j.biopha.2019.109764. [§]Corresponding author.
- 34** - Varone A, **Mariggìò S**, Patheja M, Maione V, Varriale A, Vessichelli M, Spano D, Formiggini F, Lo Monte M, Brancati N, Frucci M, Del Vecchio P, D'Auria S, Flagiello A, Iannuzzi C, Luini A, Pucci P, Banci L, Valente C, Corda D. (2019) A signalling cascade involving receptor-activated phospholipase A₂, glycerophosphoinositol 4-phosphate, Shp1 and Src in the activation of cell motility. *Cell Commun Signal.* 17:20.



- 33** - Vessichelli M*, **Marigliò S***, Varone A, Zizza P, Di Santo A, Amore C, Dell'Elba G, Cutignano A, Fontana A, Cacciapuoti C, Di Costanzo G, Zannini M, de Cristofaro T, Evangelista V, Corda D. (2017) The natural phosphoinositide derivative glycerophosphoinositol inhibits the lipopolysaccharide-induced inflammatory and thrombotic responses. *J Biol Chem.* 292:12828-12841. *Contributed equally.
- 32** - Mangini M, Iaccino E, Mosca MG, Mimmi S, D'Angelo R, Quinto I, Scala G, **Marigliò S[§]**. Peptide-guided targeting of GPR55 for anti-cancer therapy. (2017) *Oncotarget.* 8:5179-5195. doi: 10.18632/oncotarget.14121. [§]Corresponding author.
- 31** - Grauso L, **Marigliò S**, Corda D, Fontana A, Cutignano A. An improved UPLC-MS/MS platform for quantitative analysis of glycerophosphoinositol in mammalian cells. (2015) *PLoS ONE* 10(4):e0123198. eCollection 2015.
- 30** - Ohshima N, Kudo T, Yamashita Y, **Marigliò S**, Honda A, Nagano T, Kato N, Corda D, Izumi T, Yanaka N. New membrane-bound glycerophosphodiester phosphodiesterases: GDE4 and GDE7 hydrolyse lysophosphatidylcholine and lyso-PAF. (2015) *J Biol Chem.* 290:4260-71.
- 29** - De Luca AC, Reader-Harris P, Mazilu M, **Marigliò S**, Corda D, Di Falco A. Reproducible surface-enhanced Raman quantification of biomarkers in multicomponent mixtures. (2014) *ACS Nano.* 8:2575-83.
- 28** - Capestrano M, **Marigliò S**, Perinetti G, Egorova AV, Iacobacci S, Santoro M, Di Pentima A, Iurisci C, Egorov M, Di Tullio G, Buccione R, Luini A, Polishchuk RS. Cytosolic phospholipase A₂ ϵ drives recycling through the clathrin-independent endocytic route. (2014) *J Cell Sci.* 127:977-93.
- 27** - Corda D, Mosca MG, Ohshima N, Grauso L, Yanaka N, **Marigliò S[§]**. The emerging physiological roles of the glycerophosphodiesterase family. *FEBS J.* (2014) 281:998-1016. [§]Corresponding author.
- 26** - Patrussi L, **Marigliò S[§]**, Corda D, T. Baldari CT. The glycerophosphoinositols: from lipid metabolites to modulators of T cell signaling. *Frontiers in Immunology* (2013) 4:213. [§]Corresponding author.
- 25** - Zizza P, Iurisci C, Bonazzi M, Leslie CC, Cossart P, Corda D, **Marigliò S[§]**. Role of phospholipase A₂IV α in FcR-mediated phagocytosis. *J Biol Chem* (2012) 287:16849-59. [§]Corresponding author.
- 24** - Valente C, Turacchio G, **Marigliò S**, Pagliuso A, Gaibisso R, Di Tullio G, Santoro M, Formiggini F, Spanò S, Piccini D, Polishchuk R, Colanzi A, Luini A, Corda D. A 14-3-3 γ -dimer-based scaffold bridges CtBP1-S/BARS to PI4KIII β to regulate post-Golgi carrier formation. *Nat Cell Biol.* (2012) 14:343-54.
- 23** - Corda D, Zizza P, Varone A, Bruzik KS, **Marigliò S[§]**. The glycerophosphoinositols and their cellular functions. *Biochem Soc Trans.* (2012) 40:101-7. [§]Corresponding author.



- 22** - Menniti M, Iuliano R, Sopjani M, Föller M, **Marigliò S**, Nofziger C, Perri AM, Amato R, Blazer-Yost B, Corda D, Lang F, Perrotti N. 60kDa lysophospholipase, a new Sgk1 molecular partner involved in the regulation of EnaC. *Cell Physiol Biochem.* (2010) 26:587-96.
- 21** - Okazaki Y, Ohshima N, Yoshizawa I, Kamei Y, **Marigliò S**, Okamoto K, Maeda M, Nogusa Y, Fujioka Y, Izumi T, Ogawa Y, Shiro Y, Wada M, Kato N, Corda D, Yanaka N. A novel glycerophosphodiester phosphodiesterase GDE5 controls skeletal muscle development via a non-enzymatic mechanism. *J Biol Chem.* (2010) 285:27652-63.
- 20** - San Pietro E, Polishchuk EV, Di Pentima A, Trucco A, Zizza P, **Marigliò S**, Pulvirenti T, Sallese M, Tetè S, Mironov AA, Luini A, Polishchuk RS. Group IV phospholipase A₂α controls the formation of inter-cisternal continuities involved in intra-Golgi transport. *Plos Biology* (2009) Sep;7(9):e1000194.
- 19** - Corda D, Zizza P, Varone A, Filippi BM, **Marigliò S**[§]. The glycerophosphoinositols: cellular metabolism and biological functions. *Cell Mol Life Sci.* (2009) 66:3449-67. [§]Corresponding author.
- 18** - Corda D, Kudo T, Zizza P, Iurisci C, Kawai E, Kato N, Yanaka N, **Marigliò S**[§]. The developmentally regulated osteoblast phosphodiesterase GDE3 is glycerophosphoinositol specific and modulates cell growth. *J Biol Chem.* (2009) 284:24848-56. [§]Corresponding author.
- 17** - Egorov MV, Capestrano M, Vorontsova OA, Di Pentima A, Egorova AV, **Marigliò S**, Ayala MI, Tetè S, Gorski JL, Luini A, Buccione R, Polishchuk RS. Faciogenital dysplasia protein (FGD1) regulates export of cargo proteins from the golgi complex via Cdc42 activation. *Mol Biol Cell.* (2009) 20:2413-27.
- 16** - Ayala I, Giacchetti G, Caldieri G, Attanasio F, **Marigliò S**, Tetè S, Polishchuk R, Castronovo V, Buccione R. Faciogenital dysplasia protein Fgd1 regulates invadopodia biogenesis and extracellular matrix degradation and is up-regulated in prostate and breast cancer. *Cancer Res.* (2009) 69:747-52.
- 15** - Filippi BM, **Marigliò S**, Pulvirenti T, Corda D. Src-dependent signalling regulates actin ruffle formation induced by glycerophosphoinositol 4-phosphate. *Biochim Biophys Acta.* (2008) 1783:2311-22.
- 14** - **Marigliò S**[§], Filippi BM, Iurisci C, Dragani LK, De Falco V, Santoro M, Corda D. Cytosolic phospholipase A₂α regulates cell growth in RET/PTC-transformed thyroid cells. *Cancer Res.* (2007) 67:11769-78. [§]Corresponding author.
- 13** - Patrussi L, **Marigliò S**, Paccani SR, Capitani N, Zizza P, Corda D, Baldari CT. The phosphoinositide metabolite glycerophosphoinositol-4-phosphate enhances T-cell chemotaxis by activating the Rho GTPase exchange factor Vav through the PTK-dependent factor. *Cell Signal.* (2007) 19: 2351-60.



- 12 - **Mariggìo S[§]**, Iurisci C, Sebastia J, Patton-Vogt J, Corda D. Molecular characterization of a glycerophosphoinositol transporter in mammalian cells. *FEBS Lett.* (2006) *580*:6789-96. [§]Corresponding author.
- 11 - **Mariggìo S[§]**, Sebastia J, Filippi BM, Iurisci C, Volontè C, Amadio S, De Falco V, Santoro M, Corda D. A novel pathway of cell growth regulation mediated by a PLA₂ α -derived phosphoinositide metabolite. *FASEB J.* (2006) *20*:2567-9. [§]Corresponding author.
- 10 - **Mariggìo S**, Bavec A, Natale E, Zizza P, Salmona M, Corda D, Di Girolamo M. G α 13 mediates activation of the cytosolic phospholipase A₂ α through fine regulation of ERK phosphorylation. *Cell Signal.* (2006) *18*:2200-8.
- 9 - **Mariggìo S**, Garcia-Hoz C, Sarnago S, De Blasi A, Mayor F Jr, Ribas C. Tyrosine phosphorylation of G-protein-coupled-receptor kinase 2 (GRK2) by c-Src modulates its interaction with G α q. *Cell Signal.* (2006) *18*:2004-12.
- 8 - Rusk N, Le PU, **Mariggìo S**, Guay G, Iurisci C, Nabi IR, Corda D, Symons M. Synaptojanin 2 functions at an early step of clathrin-mediated endocytosis. *Curr Biol.* (2003) *13*:659-63.
- 7 - Mancini R*, Piccolo E*, **Mariggìo S***, Filippi BM, Iurisci C, Pertile P, Berrie CP, Corda D. Reorganization of actin cytoskeleton by the phosphoinositide metabolite glycerophosphoinositol 4-phosphate. *Mol Biol Cell.* (2003) *14*:503-15. *Contributed equally.
- 6 - Iacovelli L, Salvatore L, Capobianco L, Picascia A, Barletta E, Storto M, **Mariggìo S**, Sallese M, Porcellini A, Nicoletti F, De Blasi A. Role of G protein-coupled receptor kinase 4 and β -arrestin 1 in agonist-stimulated metabotropic glutamate receptor 1 internalization and activation of mitogen-activated protein kinases. *J Biol Chem.* (2003) *278*:12433-42.
- 5 - Mariggìo MA, Guarnieri S, **Mariggìo S**, Morabito C, Gianfranceschi GL, Fanò G. N-CAM expression and localization in PC12 cells modulated by extracellular peptides. *Peptides.* (2002) *23*:2151-61.
- 4 - Sallese M, **Mariggìo S**, D'Urbano E, Iacovelli L, De Blasi A. Selective regulation of Gq signaling by G protein-coupled receptor kinase 2: direct interaction of kinase N terminus with activated G α q. *Mol Pharmacol.* (2000) *57*:826-31.
- 3 - Iacovelli L, Sallese M, **Mariggìo S**, De Blasi A. Regulation of G-protein-coupled receptor kinase subtypes by calcium sensor proteins. *FASEB J.* (1999) *13*:1-8.
- 2 - Sallese M, **Mariggìo S**, Collodel G, Moretti E, Piomboni P, Baccetti B, De Blasi A. G protein-coupled receptor kinase GRK4. Molecular analysis of the four isoforms and ultrastructural localization in spermatozoa and germinal cells. *J Biol Chem.* (1997) *272*:10188-95.
- 1 - Tiecco M, Testaferri L, Tingoli M, Marini F, **Mariggìo S**. Electrophilic Phenylselenenylation of Thiophenes. Synthesis of Poly (Phenylseleno) Thiophenes. *Tetrahedron.* (1994) *50*:10549.

Chapters of Books

4 - **Marigliò S**, Filippi BM, Iurisci C and Corda D. Biological activities of the phosphoinositide derivatives, the glycerophosphoinositols. In “Chemical Probes in Biology” (Schneider M.P., ed.) Kluwer Academic Publisher, The Netherlands. p. 39-49 (2003).

2 - 3 In “The Joint Academic Programme between Italian Biomedical Research Institutions and the Open University (UK)”. The Embassy of Italy – Office of the Scientific Attaché – London. (March 2002).

- **Marigliò S**. Regulation of immune receptor functional responses by G protein-coupled receptor kinases (GRKs) and arrestins. pp. 38-48

- **Marigliò S**, Filippi BM, Iurisci C and Corda D. Reorganization of the actin cytoskeleton by the phosphoinositide metabolite glycerophosphoinositol 4-phosphate. p. 49

1 - Iacovelli L, **Marigliò S**, Franchetti R and De Blasi A. Regulation of Peptidergic G protein-coupled receptors by Receptor Kinases and Arrestins. In “Peptidergic G protein-coupled receptors: from basic research to clinical applications” (Werner Muller –Esler, D. Regoli, Thue W. Schwartz and P. Geppetti, eds.) IOS press, Amsterdam, The Netherlands. (1998).

Patents

2 - USA Patent n° US9351983 B2, Inventors: Corda D, Zizza P, Luini A, **Marigliò S** (2016) Use of glycerophosphoinositols for the treatment of septic shock.

1 - 2012 Italian Patent: IT n. RM2010A000473 “Use of glycerophosphoinositols for the treatment of septic shock”. Corda D, Luini A, Zizza P, **Marigliò S**, National Research Council (CNR).

Prizes and awards

27 Feb 2018 The National Research Council awarded a Short Term Mobility Program (1 month) in the Division of Rheumatology, Immunology and Allergy at the Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, USA. Prot. AMMCNT – CNR n. 81192, 11.12.2017.

21 Jan 2011 The European Molecular Biology Organization (EMBO) awarded a Short Term Fellowship (70 days) to visit the University of Wisconsin School of Medicine and Public Health, Madison, WI, USA. Ref: ASTF 491.00-2010.

02/10/2023, Napoli

