EUROPEAN FORMAT FOR CURRICULUM VITAE

PERSONAL INFORMATION

Name	**PALESTINI PAOLA NOVERINA ADA**
Address	School of Medicine and Surgery, UNIMIB via Cadore 48, MONZA, MB 20900 ITALY
Phone	02 6448 8205
E-mail	paola.palestini@unimib.it
Nationality	Italian
Date of birth	16 AUGUST 1959

WORKING EXPERIENCE

•2017	Habilitation at Ordinary Professor (05/E1)
•2000-att	**ASSOCIATE PROFESSOR IN BIOCHEMISTRY, SCHOOL OF MEDICINE AND SURGERY, UNIVERSITY OF MILANO-BICOCCA (1.11.00).**
•1999-2000	Researcher Department of Experimental, Environmental and Medical Biotechnology, Faculty of Medicine and Surgery, University of Milan-Bicocca, Monza.
•1994-1999	
• Name and address of the employer	University of Milano Bicocca, Piazza dell'Ateneo Nuovo,1 Milano.
• Type of business or sector	University.
• Type of employment	Associate Professor In Biochemistry, School of Medicine and Surgery
• Main activities and responsibilities	Teaching and Research.

EDUCATION AND TRAINING

1994	– EMBL fellowship (European Molecular Biology Laboratories), Heidelberg, GERMANY:
1992-1994	-Post-doctoral fellow, Department Chemistry and Biochemistry, Medical School, University of Milan;
1991	- Ph.D. Biochemistry; (Proteins and gangliosides interaction in the membrane);
1985	- Degree in Biological Sciences University of Milano (110 cum laude/110)
• Name and type of educational or training institution	University of Milano
• Principal subjects / occupational skills covered by the study	Biochemistry and Cell Biology
• Qualification achieved	Associate Professor
• Level in national classification	Associate Professor

PERSONAL SKILLS AND COMPETENCES .

NATIVE LANGUAGE	**ITALIAN**
OTHER LANGUAGES	**ENGLISH AND FRENCH**
• Reading ability	Excellent, Excellent
• Writing skills	Good, Good
• Ability to speak	Good, Good

.

ORGANIZATIONAL SKILLS

2000-att- Teacher in Neuroscience Doctorate
2013-att - Member of the Quality Teaching Presidium (PQA), University of Milano-Bicocca
2013-2015- Director of Graduate School in Nutrition, School of Medicine and Surgery, University of Milano-Bicocca
2014-att - Director of Master of Nutrition and Applied Dietetic, School of Medicine and Surgery, University of Milano-Bicocca
2017-att- Member of the Bicocca BASE Sustainability Committee

RESEARCH TOPICS

Function and structure of lipid rafts in nervous system using in vitro model (rat cerebellar granule and hippocampal cells), focusing the attention on the microdomains containing the Prion and Amyloid Proteins. b. Effect of air pollution (particular matter, PM) on health.
Particulate matter exposure is thought to induce harmful biologic pathways, both acutely within days and chronically exposure persists for years or a lifetime. Large time series analyses have been conducted in North America and Europe to estimate the acute health risk of PM exposure. In particular, the accumulating evidence for a clear association of PM exposure with increased cardiovascular morbidity and mortality.
Evidence is accumulating to support that exposure to ambient air pollutants, especially particulate matter, contributes to increased risks and poor outcomes of various neurological disorders. Ambient fine particle, a ubiquitous exposure largely generated by combustion processes, has been recognized as a pervasive threat to cardiovascular health. An increased risk for stroke was observable even at relatively low levels of exposures. Earlier neuro-epidemiological reports also linked PM to relapses in multiple sclerosis. More recent studies reported adverse effects of ambient air pollutants on cognitive decline and accelerated brain aging.
For these reasons, the studies of Prof Paola Palestini focused on the molecular mechanisms involved in cardiovascular and neurodegenerative diseases.
For these studies are used both in-vivo models (mouse) and in-vitro model (alveolar, endothelial and neuronal cells in culture). She is member of scientific committee the research centre "Polaris" (Polveri in Ambiente e Rischio per la Salute) of the University of Milano-Bicocca, which aims at better investigating nano- and micro-particles in the environment pollutant and their direct impact on human health.

INTERNATIONAL EXPERIENCES

1992- Prof. TE Thompson Dept. of Biochemistry, Medical School, University of Virginia, Charlottesville, VIRGINIA; USA: Glycolipid domains studied by electron microscopy;
1994- EMBL fellowship (European Molecular Biology Laboratories), Heidelberg, GERMANY: Ganglioside-proteins interaction in caveolae.
1999-Dr.Joseph Brunner, ETZH, Zurich, Switzerland: Lipid-Protein interaction.

GRANTS

2017-2020 Programma operativo regionale 2014-2020 obiettivo "investimenti in favore della crescita e dell'occupazione" (cofinanziato con il fesr) asse prioritario i – rafforzare la ricerca, lo sviluppo e l'innovazione. Food Social Sensor Network (Food NET; WP5 SMART CITIES ACTION, coordinator High training actions. Amount of the grant Euro 55.000.

2014-2016 Cariplo Foundation - Head UNIT -Biological effects and human health impacts of ultrafine particles sources. Amount of the grant Euro 68.750

2008-2010 Scientific Coordinator Prin- Role of lipid rafts in prion protein metabolism, studied by alteration of the lipid content of cultured neurons or by treatment with special diets of prion-infected animal models. Amount of the grant Euro 24.900.

2008-2010 Banca del Monte di Lombardia Foundation- Head project- Development of a new transportation system-release for medicines having critical bioavailability for the chemotherapy of lung tumor. Amount of the grant Euro 30.000.

2008-2011 Fondazione Cariplo Foundation Head UNIT TOSCA project - Toxicity atmospheric particulate matter and molecular markers of risk- Amount of the grant Euro 134.000.

2003-2005 Banca del Monte di Lombardia Foundation Effects of atmospheric pollution on respiratory function Amount of the grant Euro 50.000.

1999-2001 Head UNIT PRIN --Structure of endothelial plasma membrane and role of caveolae in pulmonary edema. Amount of the grant Euro 93.000.

1998-1999 CNR project n.9800488.04 –Structure and function of lipid microdomains in nervous cells Amount of the grant Euro 8.000.

Prof Paola Palestini is author of **83 articles** published on International Journals and of 130 communications of international and national congress.
http://www.ncbi.nlm.nih.gov/sites/ entrez palestini p
http://www.scopus.com/search/form.url?zone=TopNavBar&origin=resultslist entrez palestini p

SCOPUS: Author ID: 7003442377 http://orcid.org/0000-0002-1045-8838. h-index: 26; Documents: 81; Total Citations: 1824 by 1260 documents
WEB of SCIENCE h-index 25; Documents 96; Total Citations: 1797 by 1580
GOOGLE SCHOLAR h-index 30; Documents 111; Total citation 2383
RESEARCH GATE h-index 27 (26); Documents 101 (articles87) 88; Total citation 2127; RG Score 37,03

PUBBLICATIONS

1. Cremaschi, G. Meyer, C. Rossetti, G Botta' and **P. Palestini.** (1985) Immediate action of SCN^- on the apical transport of Cl^- in the epithelial cells of rabbit gallbladder **Atti Accademia Nazionale dei Lincei, Rendiconti**, 78, 103-106.

2. Cremaschi, G. Meyer, C. Rossetti, G. Botta' and **P. Palestini** (1987) The nature of the neutral Na^+-Cl^- coupled entry at the apical membrane of rabbit gallbladder epithelium; I Na^+/Cl^-, Cl^-/HCO_3^- double exchange and Na^+-Cl^- symport **J. Membrane Biol**, 95, 209-218.

3. Masserini, **P. Palestini**, B. Venerando, A. Fiorilli, D. Acquotti, and G.Tettamanti (1988) Interactions of proteins with ganglioside-enriched microdomains on the membrane: the lateral phase separation of molecular species of GD1a ganglioside, having homogeneous long-chain base composition, isrecognized by *Vibrio cholerae* sialidase **Biochemistry**, 27, 7973-7978.

4. **P. Palestini**, M. Masserini, B. Venerando, and G. Tettamanti (1989) Lipidic composition of rat brain gangliosides **The Italian Journal of Biochem**, 38, 100-103.

5. Masserini, **P. Palestini**, and E. Freire (1989) Influence of glycolipid oligosaccharide and long chain base composition on the thermotropic properties of dipalmitoylphosphatidyl-choline large unilamellar vesicles containing gangliosides **Biochemistry,** 28, 5029 -5034.

6. **P. Palestini,** M. Masserini, S. Sonnino, A. Giuliani, and G. Tettamanti (1990) Changes in the ceramide composition of rat forebrain gangliosides with age" **J. Neurochem**, 54, 230-235.

7. M. Masserini, A. Giuliani, **P. Palestini**, D. Acquotti, M. Pitto, V. Chigorno and G. Tettamanti (1990) Association to HeLa cells and

surface behaviour of exogenous gangliosides studied with a fluorescent derivative of GM1 **Biochemistry**, 29, 697-701.

8. Sarti, P., Antonini, G., Malatesta, F., Vallone, B., Brunori, M., Masserini, M., **Palestini, P.** and Tettamanti, G. (1990) Effect of gangliosides on membrane permeability studied by enzymatic and fluorescence spectroscopy techniques **Biochem J**, 267, 413-416.

9. Masserini, M., **Palestini, P.**, Pitto,M., Chigorno,V., Tomasi, M. and Tettamanti G. (1990) Cyclic AMP accumulation in HeLa cells induced by Cholera Toxin: Involvement of the ceramide moiety of GM1 ganglioside **Biochem J,** 271, 107-111.

10. Giglioni, V. Chigorno, M. Pitto, M. Valsecchi , **P. Palestini** , and R. Ghidoni (1990) Effect of the different supermolecular organization on the uptake and metabolization of exogenous GM1 ganglioside by human fibroblasts **Chem and Phys Lipids**, 55, 207-213.

11. Omodeo Sale`, F., Lindi, C., **Palestini, P.**, and Masserini, M. (1991) Role of phosphatidylethanol in membranes. Effects on membrane fluidity, tolerance to ethanol, and activity of membrane-bound enzymes **Biochemistry**, 30, 2477-2482.

12. **P. Palestini,** S. Sonnino and G. Tettamanti. (1991) Lack of the ganglioside molecular species containing the C20 -long-chain bases in human, rat, mouse, rabbit, cat, dog and chicken brains during prenatal life **J Neurochem**, 56, 2048-2050.

13. **Palestini, P.**, Masserini, M., Fiorilli, A., Calappi, E. and Tettamanti, G. (1991) Evidence for non-random distribution of GD1a ganglioside in rabbit brain microsomal fraction **J Neurochem**, 57, 748-753.

14. Masserini, M., **Palestini, P.**, Freire, E., Calappi, E. and Tettamanti G.(1992) FucGM1 ganglioside mimics the receptor function of GM1 for Cholera Toxin **Biochemistry ,** 31, 2422-2426.

15. Omodeo Sale', E., **Palestini, P.** and Masserini, M. (1992) Thermotropic behaviour of fatty acid ethyl esters in phospholipid liposomes **Chem and Phys of Lipids**, 61, 149-155.

16. Valsecchi, **P. Palestini,** V. Chigorno, S. Sonnino and G. Tettamanti. (1993) Changes in the ganglioside long-chain base composition of rat cerebellar granule cells during differentiation and aging in culture" **J Neurochem**, 60, 193-196.

17. **P. Palestini**, M. Masserini, A. Fiorilli, E. Calappi, and G. Tettamanti. (1993) Age-related changes in the ceramide composition of the major gangliosides present in rat forebrain subcellular fractions enriched in plasma membranes of neuronal and glial origin **J Neurochem**, 61, 995-960.

18. Giuliani A., **Palestini P.**, D'Aniello and M. Masserini (1993) Action of α- L-fucosidase from *Octopus Vulgaris* hepatopancreas on phospholipid vesicles containing the fucosylated ganglioside Fuc-GM1 **Glycoconjugate J**, 10, 447-452.

19. **P.Palestini**, M. Masserini, G. Tettamanti (1994) Exposure to galactose oxidase of GM1 ganglioside molecular species embedded into phospholipid vesicles **FEBS Letters,** 350, 219-222.

20. Omodeo-Sale' F. and **Palestini P.** (1994) Chronic ethanol effects on glycoconiugates and glycosyltrasferase **Alcohol**, 11, 301-306.

21. Terzaghi A., Tettamanti G., **Palestini P.**, Acquotti D., Bottiroli G., Masserini M. (1994) Fluorescence excimer formation imaging: a new technique to investigate association to cells and membrane behaviour of glycolipids **European J Cell Biol,** 64, 172-177.

22. **P. Palestini**, M. Allietta, S. Sonnino, G. Tettamanti, T.E. Thompson and T.W. Tillack. (1994) Gel phase preference of ganglioside GM1 at low concentration in two component, two-phase phosphatidylcholine bilayer depends upon the ceramide moiety **Biochem Biophys Acta**, 1235, 221-230.

23. **P. Palestini**, M. Pitto, S. Sonnino, M.F. Omodeo-Sale', and M. Masserini (1995) Spontaneous transfer of GM3 ganglioside between vesicles **Chemry and Phys Lipids**, 77, 253-260.

24. F. Omodeo-Sale', M. Pitto, M. Masserini, and **P. Palestini** (1995) Effects of chronic ethanol exposure in cultured cerebellar granule cells." **Molecular and Chemical Neuropathology,** 26, 159-169.

25. Fra, M. Masserini, **P. Palestini**, S. Sonnino and K. Simons. (1995) A photo-reactive derivative of ganglioside GM1 specifically cross-links VIP21-caveoilin on the cell surface **FEBS Letters,** 375, 11-14**.**

26. M. Valsecchi, **P. Palestini**, V. Chigorno and S. Sonnino (1995) Age-related changes of the ganglioside long chain base composition in rat cerebellum" **Neurochem International,** 28,183-187.

27. M. Pitto, **P. Palestini,** and M. Masserini (1996) Dependence of rat liver CMP-N-Acetylneuraminate: GM1 Sialyltransferase (SAT IV) activity on the ceramide composition of GM1 ganglioside **FEBS Letters,** 383, 223-226.

28. F.Omodeo-Sale', R. Gornati and **P. Palestini** (1996) Ganglioside long-chain base composition of rat brain subcellular fractions after chronic ethanol administration **Alcohol**, 13,291-295.

29. Ferraretto A., Pitto M., **Palestini P.,** and Masserini M. (1997) Lipid domains in the membrane: thermotropic properties of sphingomyelin vesicles containing GM1 ganglioside and cholesterol **Biochemistry** 36, 9232-9236.

30. **Palestini P.,** Toppi, N., Ferraretto A., Pitto M., and Masserini M. (1997) Ganglioside lateralization in the Brain of female rats **J. Neurosci Res** 50, 643-648.

31. **Palestini P.,** Pitto M., Tettamanti G., and Masserini M. (1998) Changes of ganglioside accessibility at the plasma membrane surface of cultured neurons, following protein chinase C activation **Biochemistry** 37, 3143-3148.

32. Masserini M., Pitto M., Ferraretto A., Brunner J., and **Palestini P**. (1998) Glycolipid-protein interaction in the mechanism of signal transduction: Studies with a photoactivable ganglioside analogue **Acta Biochimica Polonica** 45, 393-401.

33. Pitto M., Mutoh T., Kuriyama M., Ferraretto A., **Palestini P.,** and Masserini M. (1998) Influence of endogenous GM1 ganglioside on TrKB activity, in cultured neurons **FEBS Letters** , 439: 93-96.

34. Pitto M., **Palestini P.,** Ferraretto A., Marazzi M., Donati V., Falcone L., and Masserini M. (1999) Interaction of liposomes composed of phospholipids, GM1 ganglioside and cholesterol with human keratinocytes in culture **Arch. Dermatol. Res.** 291, 232-237.

35. Masserini M., **Palestini P.,** and Pitto M. (1999) Glycolipid-enriched, caveolae, and caveolae-like domains in the nervous system **J. Neurochem.** 7; 3 1-11.

36. M. Pitto , **Palestini P.,**Ferraretto A., Flati S., Pavan A., Ravasi D., Masserini M., Bottiroli G. (1999) Dynamics of glycolipid domains in the plasma membrane of living cultured neurons, following protein kinase C activation: a study performed by excimer-formation imaging **Biochem. J.** 344,177-184.

37. **Palestini P.,** Masserini M., Bottiroli G., Brunner J., Mutoh T., Ferraretto A., Ravasi D., and Pitto M. (1999) Involvement of glycolipid-enriched domains in the transduction mechanism of neutrophins in cultured neurons. **Bioscience Reports** 19, 385-395.

38. **Palestini P.** ,Pitto M., Tedeschi G., Ferraretto A., Parenti M., Brunner J., and Masserini M. (2000) Tubulin anchoring to glycolipid-enriched, detergent-resistant domains of the neuronal plasma membrane **J. Biol. Chem.** 275, 9978-9986.

39. Chigorno V., **Palestini P.,** Sciannamblo M., Dolo V., Pavan A., Tettamani G.,and Sonnino S. (2000). Evidence that ganglioside enriched domains are distinct from caveolae in MDCK II and human fibroblast cells in culture" **European J Biochem**. 267, 4187-4197.

40. Pitto, M., Brunner, J., Ferraretto, A., Ravasi, D., **Palestini, P.,** Masserini, M. (2000) Use of a photoactivable GM1 ganglioside analogue to assess lipid distribution in caveolae bilayer **Glycoconjugate J**, 17 (3-4) 215-222

41. **Palestini P.**, Botto L., Guzzi F., Calvi C., Ravasi D., Masserini M., and Pitto M. (2002) Developmental changes in the protein composition of sphingolipid- and cholesterol-enriched membrane domains of rat cerebellar granule cells **J of Neuroscience Res.** 67, 729-738.

42. **Palestini P.,** Calvi C., Conforti E., Botto L., Fenoglio C., and Miserocchi G. (2002) Composition, biophysical properties and morphometry of plasmamembranes in pulmonary interstitial edema **Am J Physiol.** 282, L1382-L1390.

43. Pitto M., Parenti M., Guzzi F., Magni F., **Palestini P.,** Ravasi D., and Masserini M. (2002) Palmitic is the main fatty acid carried by lipids of detergent-resistant membrane fractions from neural and non-neural cells **Neurochem Res.** 27, 729-34.

44. **Palestini P.** Calvi C., Conforti E., Daffara R., Botto L., and Miserocchi G. (2003) Compositional changes in lipid microdomains of air-blood barrier plasma membranes in pulmonary interstitial edema **J. Appl. Physiol.** 95; 1446-1145.

45. Botto L., Masserini M., Cassetti A. and **Palestini P.** (2004) Immunoseparation of prion protein-enriched domains from other detergent-resistant membrane fractions, isolated from neuronal cells **FEBS Letters** 557; 143-147.

46. Daffara R., Botto L., Beretta E., Conforti E., Faini A., **Palestini P.,** and Miserocchi G. (2004) Endothelial cells as early sensors of pulmonary interstitial edema **J Appl Physiol** 97:1575-83.

47. Sangiorgio V., Pitto M., **Palestini P.** and Masserini M. (2004) GPI-anchored proteins and lipid rafts **Italian J. Biochem.** 53, 98-111

48. Botto L., Beretta E., Daffara R., Miserocchi G., and **Palestini P** (2006) Biochemical and morphological changes in endothelial cells in response to hypoxic interstitial edema **Resp Research** 7, 7-20

49. Botto L. Masserini M., and **Palestini P.** (2007) Changes in the composition of detergent-resistant membrane domains of cultured neurons, following protein kinase C activation **J Neurosc Res** 85, 443-450

50. Cazzaniga E., Bulbarelli A., Cassetti A., Lonati E., Re F., **Palestini P**., Mutoh T., and Masserini M. (2007) β-Amyloid (25-35) enhances lipid metabolism and protein ubiquitination in cultured neurons **J Neurosc Res,** 85, 2253-2261

51. Beretta E., Gualtieri M., Botto L., **Palestini P**., Miserocchi G., and Camatini M. (2007) Organic extract of tire debris causes localized damage in plasma membrane of human lung epithelial cells **Toxicol Lett.** 173,191-200.

52. Botto L, Beretta E, Bulbarelli A, Rivolta I, Lettiero B, Leone BE, Miserocchi G and **Palestini P** (2008) Hypoxia-induced modifications in plasma membranes and lipid microdomains in A549 cells and primary human alveolar cells **J Cel Biochem** 105, 503-513.

53. Bernabò N, **Palestini P**, Botto L, Pistilli MG, Falasca G, Gloria A, Mattioli M, Barboni B.(2009) Lipidic microdomain reorganization

during the in vitro capacitation of boar spermatozoa. **Vet Res Commun**. 33 Suppl 1:81-3.

54. Mantecca P, Sancini G, Moschini E, Farina F, Gualtieri M, Rohr A, Miserocchi G, **Palestini P**, Camatini M. (2009) Lung toxicity induced by intratracheal instillation of size-fractionated tire particles. **Toxicol Lett**. 189(3):206-14.

55. Farina F, Botto L, Chinello C, Cunati D, Magni F, Masserini M, **Palestini P.** (2009) Characterization of prion protein-enriched domains, isolated from rat cerebellar granule cells in culture. **J Neurochem**. 110(3):1038-1048.

56. Mantecca P, Farina F, Moschini E, Gallinotti D, Gualtieri M, Rohr A, Sancini G, **Palestini P**, Camatini M. (2010) Comparative acute lung inflammation induced by atmospheric PM and size-fractionated tire particles. **Toxicol Lett**. 198:244-254.

57. Laura Botto, Nicola Bernabò, **Paola Palestini**, Barbara Barboni (2010) Bicarbonate induces the membranes reorganization and the CB1R and TRPV1 endocannabionid receptors migration in lipid microdomains in capacitating boar spermatozoa. **J Membrane Biol.** 238: 33-41

58. Farina F., Sancini G, Mantecca P., Gallinotti D., Camatini M. and **Palestini P** (2011) The acute toxic effects of particulate matter in mouse lung are related to size and season of collection **Toxicol Lett** 202: 209-217.

59. Barboni B, Bernabò N, **Palestini P**, Botto L, Pistilli MG, Charini M, Tettamanti E, Battista N, Maccarrone M, Mattioli M. (2011) Type-1 cannabinoid receptors reduce membrane fluidity of capacitated boar sperm by impairing their activation by bicarbonate. **PLoS One**.6 (8):e23038.

60. **Palestini P**., Botto L., Rivolta I., Miserocchi G. (2012) Remodelling of Membrane Rafts Expression in Lung Cells as an Early Sign of Mechanotransduction-Signalling in Pulmonary Edema **J. of Lipids**, Article ID 695369, 11 pages doi:10.1155/2011/695369

61. Palestini P., Cunati D., Farina F., and Botto L (2012) Membrane Rafts in the respiratory system **Current Respiratory Medicine Review** 8, 90-99.

62. Bernabò N, **Palestini P**, Chiarini M, Maccarrone M, Mattioli M, Barboni B. (2012) Endocannabinoid-binding CB1 and TRPV1 receptors as modulators of sperm capacitation. **Commun Integr Biol.** 5(1):68-70.

63. Mantecca P., Gualtieri M., Longhin E., Bestetti G., **Palestini P.,** Bolzacchini E., Camatini M (2012) Adverse biological effects of Milan urban PM looking for suitable molecular markers of exposure **Chem Ind. and Chem. Eng Quarterly** 8(8)63-641.

64. Farina F., Sancini G., Longhin E., Mantecca P., Camatini M. and **Palestini P.** (2013) Milan PM1 Induces Adverse Effects on Mice Lungs and Cardiovascular System. **BioMed Res.Intern.** Vol 2013, Article ID 583513, 10 pages; http://dx.doi.org/10.1155/2013/583513

65. Farina F., Sancini G., Battaglia C., Tinaglia V., Mantecca P., Camatini M., **Palestini P.** (2013) Milano summer particulate matter (PM10) triggers lung inflammation and extra pulmonary adverse events in mice

PLoSOne. 8(2):e56636. doi: 10.1371/journal.pone.0056636. Epub 2013 Feb 25. PubMed PMID:23451061

66. Elena Lonati, Anna Brambilla, Chiara Milani, Massimo Masserini, **Paola Palestini** and Alessandra Bulbarelli (2014) Pin1, a new player in the fate of HIF-1a degradation: an hypothetical mechanism inside vascular damage as Alzheimer's disease risk factor **Frontiers in Cellular Neuroscience** 8, 1-11 -doi: 10.3389/fncel.2014.00001

67. Laura Botto, Diana Cunati, Silvia Coco, Silvia Sesana, Alessandra Bulbarelli, Emiliano Biasini, Laura Colombo, Alessandro Negro, Roberto Chiesa, Massimo Masserini, **Paola Palestini** (2014) Role of Lipid Rafts and GM1 in the Segregation and Processing of Prion Protein **PLoS ONE** 9, (5) e98344 doi:10.1371/journal.pone.0098344

68. Sancini G, Farina F, Battaglia C, Cifola I, Mangano E, Mantecca P, Camatini M, **Palestini P (**2014) Health Risk Assessment for Air Pollutants: Alterations in Lung and Cardiac Gene Expression in Mice Exposed to Milano Winter Fine Particulate Matter (PM2.5). **PLoS One**. Oct 8;9(10):e109685. doi: 10.1371/journal.pone.0109685.

69. Rizzo AM, Corsetto PA, Farina F, Montorfano G, Pani G, Battaglia C, Sancini G, **Palestini P.** (2014) Repeated Intratracheal Instillation of PM10 Induces Lipid Reshaping in Lung Parenchyma and in Extra-Pulmonary Tissues**. PLoS One**. 2014 Sep 26;9(9):e106855. doi: 0.1371/journal.pone.0106855

70. Brambilla, A., Lonati, E., Milani, C., Rizzo, A.M., Farina, F., Botto, L., Masserini, M., **Palestini, P.,** Bulbarelli, A. (2015) Ischemic conditions and β-secretase activation: The impact of membrane cholesterol enrichment as triggering factor in rat brain endothelial cells **International Journal of Biochemistry and Cell Biology** Vol 69, Pages 95-104 DOI: 10.1016/j.biocel.2015.10.005

71. Dall'Ara P, Iulini B, Botto L, Filipe J, Martino PA, Pintore MD, Gazzuola P, Mazza M, Dagrada M, Ingravalle F, Casalone C, **Palestini P**, Poli G. (2016) Diets with different lipid contents do not modify the neuronal membrane lipid raft profile in a scrapie murine model. **Life Sci.** Jan 1; 144:226-33. doi: 10.1016/j.lfs.2015.12.008. Epub 2015 Dec 3.

72. Farina F., Milani, C., Botto, L., Lonati E., Bulbarelli A., **Palestini, P**. (2016) Involvement of MEK-ERK1-2 pathway in the anti-oxidant response in C6 glioma cells after diesel exhaust particles exposure **Toxicology Letters** 250-251, 57-65 doi: 10.1016/j.toxlet.2016.04.008.

73. Francesca F., Lonati E., Brambilla A., Dal Magro R., Milani C., Botto L., Sancini G., **Palestini P.,** Bulbarelli A. (2017) Diesel exhaust particles (DEP) pre-exposure contributes to the anti-oxidant response impairment in hCMEC/D3 during post-oxygen and glucose deprivation damage **Toxicology Letters** 274 (2017) 1–7 http://dx.doi.org/10.1016/j.toxlet.2017.04.003

74. Nicola Bernabò, Luca Valbonetti, Luana Greco, Giulia Capacchietti, Marina Ramal Sanchez, **Paola Palestini**, Laura Botto, Mauro Mattioli and Barbara Barboni (2017) Aminopurvalanol A, a Potent, Selective, and Cell Permeable Inhibitor of Cyclins/Cdk Complexes, Causes the Reduction of in Vitro Fertilizing Ability of Boar Spermatozoa, by

Negatively Affecting the Capacitation-Dependent Actin Polymerization. Front. Physiol., 22 12 2017. https://doi.org/10.3389/fphys.2017.01097

75. Maloberti A, Farina F, Carbonaro M, Piccinelli E, Bassi I, Pansera F, Grassi G, Mancia G, **Palestini P**, Giannattasio C. (2018) In healthy normotensive subjects age and blood pressure better predict subclinical vascular and cardiac organ damage than atherosclerosis biomarkers Blood Press. 1-9. doi: 10.1080/08037051.2018.1461010

76. Orlando A, Cazzaniga E, Giussani M, **Palestini P**, Genovesi S (2018) Hypertension in children: role of obesity, simple carbohydrates and uric acid. Frontiers in Public Health 6. DOI10.3389/fpubh.2018.00129

77. Milani C, Corsetto PA, Farina F, Botto L, Lonati E, Massimino L, Rizzo AM, Bulbarelli A, **Palestini P**.(2018) Early evidence of stress in immortalized neurons exposed to diesel particles: the role of lipid reshaping behind oxidative stress and inflammation. Toxicology. Nov 1; 409:63-72. doi: 10.1016/j.tox.2018.07.017

78. Lonati E, Sala G, Tresoldi V, Coco S, Salerno D, Milani C, Losurdo M, Farina F, Botto L, Ferrarese C, **Palestini P,** Bulbarelli A. (2018) Ischemic Conditions Affect Rerouting of Tau Protein Levels: Evidences for Alteration in Tau Processing and Secretion in Hippocampal Neurons J Mol Neurosci. Dec; 66(4):604-616. doi: 10.1007/s12031-018-1199-7

79. Orlando A., Viazzi F., Giussani M., Nava E., Cazzaniga E., Bonino B., **Palestini P.,** Parati G. and Genovesi S. (2019) Endothelin-1/nitric oxide balance and HOMA index in children with excess weight and hypertension: a pathophysiological model of hypertension Hypertension Research March 29, 2019. doi.org/10.1038/s41440-019-0253-3

80. Bernabò N., Machado-Simoes J., Valbonetti L., Ramal-Sanchez M., Capacchietti G., Fontana A., Zappacosta R., **Palestini P**., Botto L., Marchisio M., Lanuti P., Ciulla M., Di Stefano A., Fioroni E., Spina M., and Barboni B.(2019) Graphene Oxide increases mammalian spermatozoa fertilizing ability by extracting cholesterol from their membranes and promoting capacitation. Sc Reports 9:8155 doi.org/10.1038/s41598-019-44702-5

81. Farina F., Lonati E., Milani C., Massimino L., Ballarini E., Donzelli E., Crippa L., Marmiroli P., Botto L., Corsetto PA., Sancini G., Bulbarelli A and **Palestini P** (2019) In vivo comparative study on acute and sub-acute biological effects induced by ultrafine particles of different anthropogenic sources in BALB/c mice. Int. J. Mol. Sci. 2019, 20, 2805; doi:10.3390/ijms20112805

82. Lonati E, Corsetto PA, Montorfano G, Zava S, Carrozzini T, Brambilla A, Botto L, **Palestini P**, Rizzo AM, Bulbarelli A.(2019) Lipid Reshaping and Lipophagy Are Induced in a Modeled Ischemia-Reperfusion Injury of Blood Brain Barrier. Int J Mol Sci. 2019 Jul 31; 20(15). pii: E3752. doi: 10.3390/ijms20153752.

83. Orlando A., Cassera A., **Palestini P** and Cazzaniga E. (2019) Can Nutrition Education in Primary Schools be an Efficient Way to Prevent

Obesity in Adult Life? A Review of the Literature Acta Scientific Nutritional Health September Vol 3 (9) 75-85.

Chapter Book

1. S. Sonnino, M. Valsecchi,, V. Chigorno, M. Nicolini and **P. Palestini** (1996) High Performance Liquid Chromatography of gangliosides Techniques in Glycobiology Ed. Vol 9 pp 127.
2. Masserini M., **Palestini P**., Pitto M., Chigorno V., and Sonnino S (2002) Preparation and use of liposomes for the study of sphingolipid segregation in membrane model systems. Methods Mol Biol. 199:17-27.
3. Farina F., Sancini G., **Palestini P**. (2011) Seasonality effects on lung and systemic markers following intratracheal instillation of PM10 and PM1 Chemical Engineering Transactions 22: 15-22. >DOI: 10.3303/CET1022002
4. Bernabò N., **Palestini P**., Botto L., Mattioli M., and Barboni B. (2014) Membrane Dynamics occurring during Capacitation of Mamalian Spermatozoa-in Spermatozoa Biology, Motility and Function and Chromosomal Abnormalities. pp 99-121; Brenda T. Erickson Ed Nova Biomedical NY USA ISBN 978-1-63117-020-1
5. **Palestini P**, Sancini G, Farina F (2012). L'impatto del PM sulle cellule. In: Camatini M; Palestini P Sancini G; Mantecca P; Gualtieri M; Bolzacchini E; Bestetti G; Pesci A; Cesana G; De Vito G. (a cura di): Camatini M; Gandolfi S, I veleni nell'aria. vol. 1, p. 37-54, Milano:RCS Quotidiani

TEACHING EXPERIENCES

She's Member of Educational Committee (PQA) of University of Milano-Bicocca

- Biochemistry and Molecular Biology course at Medical School
- Tutor for Biochemistry and Medical Chemistry
- Biochemistry course at Nursery and Midwifery Schools
- Biochemistry course at the Technician on Neurophysiophatology children's and Physiotherapists Schools
- Biochemistry and Neurobiochemistry courses in Postgraduate School in: Human Nutrition, Clinical Biochemistry, Neurology, Neurosurgery, Sport Medicine, Psychiatry, Pneumology, Cardiology, General Medicine, Endocrinology, Neuropsychiatry children's.
- Teacher and tutor in Neuroscience doctorate
- Teacher in ICOM International College of Osteopathic Medicine
- Coordinator master ADA Alimentazione e Dietetica Applicata (Applied Nutrition)

Congress, Invited speaker

- Reshaping of lipid microdomains after exposure to exogenous agents (Hypoxia and Particulate Matter). Invited speaker, 3 National Congress ARNA 2008, Teramo September 18-20, 2008.

-Membrane lipid rafts in sperm decision- Invited speaker, Congress Cell decision in development an stem cell function, Teramo November 13-14, 2008

-Health Risk Assessment for Air Pollutants: lung inflammation and extra pulmonary adverse events are correlated to particulate matter size, origin and season of collection. Invited speaker, in the symposium, "Environmental Pollutants, Toxicology and Influence on Human Health XIV International Congress of Toxicology Merida-Mexico October 2-6, 2016.

- Oxidative stress and inflammation induced by acute and sub-acute UFPs exposures: contribution to neurodegenerative disease onset Invited speaker, 13 thAnnual International Symposium on Environment, Athens 28-31 May 2018

Congress organization

-**Session of Membranes and Bioenergetics group** in 53 National Meeting of Italian Society of Biochemistry and Molecular Biology Riccione, 23-26 September 2008

-Scientific committee and chairman in **55 National Meeting of Italian Society of Biochemistry and Molecular Biology** Milano 14-17 September 2010,

- **EXPO 2015, Feeding the Planet, Energy for Life**, organization of RICE CLUSTER and the meeting TAKE CARE: people, world challenges Cascina Triulza, Milano 30 May, 2015

DATE October 2019

PAOLA PALESTINI