

PIERO DEL BOCCIO
Curriculum Vitae

Contact details

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RESEARCHER UNIQUE IDENTIFIER

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EDUCATION AND QUALIFICATION

- **March 2005: Ph.D.** in “**Biomedical and cytomorphological Sciences**” at the University “G. d’Annunzio” of Chieti-Pescara, Biomedical Sciences Department.
- **April 2001: Master’s degree in environmental sciences** at University of L’Aquila, Italy, with the mark of 110/110 cum laude

EMPLOYMENT AND ACADEMIC RANK

Present position:

Since October 2015: **Associate Professor (SSD: BIO10; SC:05 E3)** at Department of Pharmacy, University “G. d’Annunzio” of Chieti-Pescara,

Previous positions

- **2008-2015: Researcher** (Permanently Employed) at Department of Experimental and Clinical Sciences, University “G. d’Annunzio” of Chieti-Pescara, Italy.
- **2005-2008: Post-doctoral Fellow** at the University “G. d’Annunzio” of Chieti-Pescara, Biomedical Sciences Department.
- **2003-2005: PhD Student** in Biomedical Sciences in the “G. d’Annunzio” University of Chieti.
- **2001-2003: Researcher** at the “Mario Negri Sud” Pharmacological Research Institute, Santa Maria Imbaro (Chieti), Italy.

TEACHING ACTIVITIES

- Since 2008: **Lectureship of “Biochemistry and Applied Biochemistry”** in master’s degree of Pharmacy, G.d’Annunzio University
- Since 2018: **Lectureship of “Medical Chemistry”** in master’s degree in Dentistry And Orthodontics, G.d’Annunzio University
- 2015-2017: **Lectureship of “Biochemistry”** in Occupational therapy (1st Cycle Degree), G.d’Annunzio University

- 2015-2017: **Lectureship of “Biochemistry” in CARDIOCIRCULATORY AND CARDIOVASCULAR PERFUSION TECHNIQUES** (1st Cycle Degree), G.d’Annunzio University

BOARD MEMBER OF PhD COURSE

- Since 2016 He is a Member of the Teaching Board of the PhD course in Medical Biotechnology “School of Advanced Studies” University “G. d’Annunzio”

MEMBERSHIPS IN SCIENTIFIC SOCIETIES

- Organizer of the -56TH NATIONAL MEETING OF THE ITALIAN SOCIETY OF BIOCHEMISTRY AND MOLEC.BIOL. (CHIETI 2012)
- Italian Proteomics Association (ItPa).
- European Proteomics Association (EuPA)
- (2012-2013) European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS)

SCOUPS PARAMETERS (March 2020)

Documents: **63**

Citations: **1585**

H-index: **25**

SCIENTIFIC ACHIEVEMENTS

Piero Del Boccio Ph.D is Associated Professor SSD BIO/10, from 01/10/2015, Department of Pharmacy, "G. d'Annunzio" University Chieti, Italy. He started his research experience in 1999 within the research group of Prof De Angelis (L'Aquila University, Italy) studying enzyme activity in surfactant media through mass spectrometry technologies. After his master degree (with the mark of 110/110 cum laude) in Environmental Sciences (2001) he moved to Santa Maria Imbaro (Chieti, Italy) at the “Mario Negri Sud” Pharmacological Research Institute (2001-2003) where he has been working on the development of analytical methods for the study of natural compounds of pharmacological interest both in natural and biological matrices using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS). Following this experience, he moved to Chieti University at the Biomedical Sciences Department, for a PhD program. During the PhD training he has been working in the Analytical Biochemistry and Proteomics Unit at the Ce.S.I., Centre of Study on Aging. His scientific experience has been mostly focused in the identification and characterization of metabolic and protein alteration in different area of Biomedical Research (mainly neurodegenerative disorders) by proteomics and metabolomics approach.

He published many milestone papers on samples handling for proteomics study, by highlighting important ex-vivo alteration in sera and Cerebrospinal fluid (CSF) of patients affected by Multiple Sclerosis (MS). During this period many studies aimed to characterize molecular alterations in the neurodegenerative diseases are published; papers in which he characterizes specific post-translational modifications of proteins and altered lipidomics profiling in CSF of MS subjects. In the last years His research was focuses on tears, considered a window on the nervous system, demonstrating that the Extracellular Vesicles (EVs) can represent the shuttles able to allow the cross-talk between CSF and tears, demonstrating that EVs from CSF and tears carrying very similar protein cargo. Those results were obtained thanks to a new developed protocol in collaboration with other resident groups at the CAST center, consisting in an optimized proteomics approach for the study of FACS-sorted EVs from untouched biological samples. Such a new strategy for the molecular study of EVs can be employed in a wide range of biomedical issues.

EDITORIAL ACTIVITIES

Editorial Board:

- Member of the EDITORIAL BOARD: Frontiers in Pharmacology/ Inflammation Pharmacology. Section: review Editor. <https://loop.frontiersin.org/people/13606/overview>
- Member of Editorial Board “Proteomes (ISSN 2227-7382; CODEN: PROTHC) MDPI. Guest editor of the special issue Special Issue "Human Proteomics": https://www.mdpi.com/journal/proteomes/special_issues/human_proteomics

Review Board:

Ad hoc Reviewer for the following international journals

Molecular BioSystems; Frontiers in Inflammation Pharmacology; Methods; Plos one; Journal of Proteomics; Proteomics Clinical Application; Journal of Proteome Research; Scientific Reports; Analytical Biochemistry: Methods in the Biological Sciences; Biomedical Chromatography; EuPA Open Proteomics; Expert Review of Proteomics; International Journal of Biochemistry & Cell Biology; Journal of Biomolecular Screening; Toxicology Research.

FUNDED PROJECTS

- Role: collaborator

Project: IG2011-11450-

Source: **AIRC**- “Role of p63 in mammary tumors cancer stem cells”.

from 15-11-2012 to 01-01-2015

PI: Prof. De Laurenzi.

- Role PI: From 1th, November 2017

Source: **Ministero dell’Istruzione, dell’Università e della Ricerca**

Direzione Generale per il Coordinamento e lo Sviluppo della Ricerca (Ufficio VI)

Progetto di Ricerca DM61319

Titolo: Programma IPAFree: Identificazione e Caratterizzazione di Biomarcatori Analitici Molecolari per lo sviluppo di una Certificazione di Qualità per l’assenza di Idrocarburi

Policiclici Aromatici nelle filiere di produzione lattiero-casearie

Ente proponente: Consorzio di Ricerca per l’Innovazione Tecnologica la Qualità e la Sicurezza degli Alimenti (ITQSA).

Ambito 3 - Tecnologie di monitoraggio e controllo ambientale

From 31-12-2012 to 30-07-2019 (Funds UO: 253.714 euro)

- Role: PI

Source **GRANT FISM 2015** (Fondazione Italiana Sclerosi Multipla).

1 year Pilot project (march 2016-april 2017)

Funds: 29.500 €

Project Title: Study of tears metabolome for the research of new molecular biomarkers in multiple sclerosis. Project Code:2015/R/12

- Role: PI

Source: **Italian Ministry of Health**

Bando Progetti di Ricerca Giovani Ricercatori – Ricerca Finalizzata 2010 –

Project Title: lipidomic investigations in Multiple Sclerosis: research of molecular biomarkers.
Project Code:GR-2010-2307655. (2013-2016-funds: 162.000 €).

- Role: Collaborator

Source: **POR FESR** Abruzzo 2014-2020

Project SANI - Saper NutrIre. Scope: Agrifood.

- Role: Co-Supervisor Operative Unit "G. d'Annunzio" Chieti -UdA- (PI: Damiana Pieragostino).

Source: **MARIE SKLODOWSKA-CURIE ACTIONS Innovative Training Networks (ITN)**

Call: H2020-MSCA-ITN-2018 (813263). Project Title: Novel Biomaterial-based Device for the Treatment of Progressive MS - An Integrated Pan- European Approach (PMSMatTrain)

Project Code (813263). (funds UO UdA: 274.684 €)

Form May 2019 to June 2023

ORIGINAL PEER-REVIEWED PUBLICATIONS (total)

1. Rosalinda Madonna*, Damiana Pieragostino*, Claudia Rossi, Pamela Confalone, Ilaria Cicalini, Ilaria Minnucci, Mirco Zucchelli, **Piero Del Boccio**, Raffaele De Caterina "Simulated hyperglycemia impairs insulin signaling in endothelial cells through a hyperosmolar mechanism" In Press on *Vascular Pharmacology*
2. Rosalinda Madonna, Damiana Pieragostino, Maria Concetta Kufaro, Vanessa Doria, **Piero Del Boccio**, Martino Deidda, Sante Donato Pierdomenico, Christian C. Dessalvi, Raffaele De Caterina *, Giuseppe Mercurio "Ponatinib induces vascular toxicity through Notch-1 signaling pathway" *Journal of Clinical Medicine* In press
3. Brocco D, Lanuti P, Simeone P, Bologna G, Pieragostino D, Cufaro MC, Graziano V, Peri M, Di Marino P, De Tursi M, Grassadonia A, Rapposelli IG, Pierdomenico L, Ercolino E, Ciccocioppo F, **Del Boccio P**, Marchisio M, Natoli C, Miscia S, Tinari N. Circulating Cancer Stem Cell-Derived Extracellular Vesicles as a Novel Biomarker for Clinical Outcome Evaluation. *J Oncol.* 2019 Nov 18;2019:5879616. doi: 10.1155/2019/5879616.
4. Ciccocioppo F, Bologna G, Ercolino E, Pierdomenico L, Simeone P, Lanuti P, Pieragostino D, **Del Boccio P**, Marchisio M, Miscia S. Neurodegenerative diseases as proteinopathies-driven immune disorders. *Neural Regen Res.* 2020 May;15(5):850-856. doi: 10.4103/1673-5374.268971. Review.
5. Granzotto A, Bomba M, Castelli V, Navarra R, Massetti N, d'Aurora M, Onofri M, Cicalini I, **Del Boccio P**, Gatta V, Cimini A, Piomelli D, Sensi SL. Inhibition of de novo ceramide biosynthesis affects aging phenotype in an in vitro model of neuronal senescence. *Aging (Albany NY).* 2019 Aug 29;11(16):6336-6357. doi: 10.18632/aging.102191.
6. Rossi C, Cicalini I, Cufaro MC, Agnifili L, Mastropasqua L, Lanuti P, Marchisio M, De Laurenzi V, **Del Boccio P**, Pieragostino D. Multi-Omics Approach for Studying Tears in Treatment-Naïve Glaucoma Patients. *Int J Mol Sci.* 2019 Aug 18;20(16). pii: E4029. doi: 10.3390/ijms20164029.

7. Cufaro MC, Pieragostino D, Lanuti P, Rossi C, Cicalini I, Federici L, De Laurenzi V, **Del Boccio P.** Extracellular Vesicles and Their Potential Use in Monitoring Cancer Progression and Therapy: The Contribution of Proteomics. *J Oncol.* 2019 Jun 9;2019:1639854. doi: 10.1155/2019/1639854. eCollection 2019. Review.
8. Pieragostino D, Lanuti P, Cicalini I, Cufaro MC, Ciccocioppo F, Ronci M, Simeone P, Onofrj M, van der Pol E, Fontana A, Marchisio M, **Del Boccio P.** Proteomics characterization of extracellular vesicles sorted by flow cytometry reveals a disease-specific molecular cross-talk from cerebrospinal fluid and tears in multiple sclerosis. *J Proteomics.* 2019 Jul 30;204:103403. doi: 10.1016/j.jprot.2019.103403.
9. Cicalini I, Rossi C, Pieragostino D, Agnifili L, Mastropasqua L, di Ioia M, De Luca G, Onofrj M, Federici L, **Del Boccio P** Integrated Lipidomics and Metabolomics Analysis of Tears in Multiple Sclerosis: An Insight into Diagnostic Potential of Lacrimal Fluid.. *Int J Mol Sci.* 2019 Mar 13;20(6). pii: E1265. doi: 10.3390/ijms20061265.
10. Rossi C, Cicalini I, Zucchelli M, di Ioia M, Onofrj M, Federici L, **Del Boccio P.** Pieragostino D. Metabolomic Signature in Sera of Multiple Sclerosis Patients during Pregnancy. *Int J Mol Sci.* 2018 Nov 14;19(11). ISSN 1422-0067
11. Coccia F, Tonucci L, **Del Boccio P.** Caporali S, Hollmann F, d'Alessandro N. Stereoselective Double Reduction of 3-Methyl-2-cyclohexenone, by Use of Palladium and Platinum Nanoparticles, in Tandem with Alcohol Dehydrogenase. *Nanomaterials (Basel).* 2018 Oct 19;8(10).
12. Pieragostino D, Cicalini I, Lanuti P, Ercolino E, di Ioia M, Zucchelli M, Zappacosta R, Miscia S, Marchisio M, Sacchetta P, Onofrj M, **Del Boccio P.** Enhanced release of acid sphingomyelinase-enriched exosomes generates a lipidomics signature in CSF of Multiple Sclerosis patients. *Sci Rep.* 2018 Feb 15;8(1):3071. ISSN: 2045-2322
13. Madonna R, Pieragostino D, Balistreri CR, Rossi C, Geng YJ, **Del Boccio P.** De Caterina R. Diabetic macroangiopathy: Pathogenetic insights and novel therapeutic approaches with focus on high glucose-mediated vascular damage. *Vascul Pharmacol.* 2018 Feb 6. Review. ISSN: 1537-1891.
14. Pieragostino D., Agnifili L., Cicalini I., Calienno R., Zucchelli M., Mastropasqua L., Sacchetta P., **Del Boccio P.** and Rossi C. Tear Film Steroid Profiling in Dry Eye Disease by Liquid Chromatography Tandem Mass Spectrometry: A pilot study. *Int. J. Mol. Sci.* 2017, 18(7), 1349; ISSN 1422-0067
15. Di Crescenzo, A, Cacciatore, I., Petrini, M., D'Alessandro, M., Petraghani, N, **Del Boccio, P.**, Di Profio, P., Boncompagni, S., Spoto, G., Turkez, H., Ballerini, P., Di Stefano, A., Fontana, A. Gold nanoparticles as scaffolds for poor water soluble and difficult to vehiculate antiparkinson codrugs. *Nanotechnology Volume 28, Issue 2, 13 January.* Online ISSN: 1361-6528
16. **Del Boccio, P.**, Perrotti, F., Rossi, C., Cicalini, I., Di Santo, S., Zucchelli, M., Sacchetta, P., Genovesi, D., Pieragostino, D. Serum lipidomic study reveals potential early biomarkers for predicting response to chemoradiation therapy in advanced rectal cancer: A pilot study. *Advances in Radiation Oncology* 2017 2017 Jan 5;2(2):118-124. ISSN: 2452-1094.

17. Perrotti F, Rosa C, Cicalini I, Sacchetta P, **Del Boccio P**, Genovesi D, Pieragostino D. Advances in Lipidomics for Cancer Biomarkers Discovery. *Int J Mol Sci*. 2016 Nov 28;17(12). pii: E1992. Review. ISSN 1422-0067
18. **Del Boccio P**, Rossi C, di Ioia M, Cicalini I, Sacchetta P, Pieragostino D. Integration of metabolomics and proteomics in multiple sclerosis: From biomarkers discovery to personalized medicine. *Proteomics Clin Appl*. 2016 Apr;10(4):470-84. doi: 10.1002/prca.201500083. Review. Online ISSN: 1862-8354.
19. Vergara D, D'Alessandro M, Rizzello A, De Riccardis L, Lunetti P, **Del Boccio P**, De Robertis F, Trianni G, Maffia M, Giudetti AM. A lipidomic approach to the study of human CD4(+) T lymphocytes in multiple sclerosis. *BMC Neurosci*. 2015 Jul 24;16:46. doi: 10.1186/s12868-015-0183-1. Online ISSN: 1471-2202.
20. Pieragostino D, D'Alessandro M, di Ioia M, Rossi C, Zuchelli M, Urbani A, Di Ilio C, Lugaresi A, Sacchetta P, **Del Boccio P**. An integrated metabolomics approach for the research of new cerebrospinal fluid biomarkers of multiple sclerosis. *Mol Biosyst*. 2015 Jun;11(6):1563-72. doi: 10.1039/c4mb00700j. ISSN: 1742-206X.
21. Pieragostino D, D'Alessandro M, di Ioia M, Di Ilio C, Sacchetta P, **Del Boccio P**. Unraveling the molecular repertoire of tears as a source of biomarkers: beyond ocular diseases. *Proteomics Clin Appl*. 2015 Feb;9(1-2):169-86. doi: 10.1002/prca.201400084. Online ISSN: 1862-8354
22. Patrignani P, Tacconelli S, Piazzuelo E, Di Francesco L, Dovizio M, Sostres C, Marcantoni E, Guillem-Llobat P, **Del Boccio P**, Zuchelli M, Patrono C, Lanas A. Reappraisal of the clinical pharmacology of low-dose aspirin by comparing novel direct and traditional indirect biomarkers of drug action. *J Thromb Haemost*. 2014 Aug;12(8):1320-30. doi: 10.1111/jth.12637. Online ISSN: 1538-7836
23. Allocati N, Masulli M, **Del Boccio P**, Pieragostino D, D'Antonio D, Sheehan D, Di Ilio C. Identification of an elongation factor 1B γ protein with glutathione transferase activity in both yeast and mycelial morphologies from human pathogenic *Blastoschizomyces capitatus*. *Folia Microbiol (Praha)*. 2014 Mar;59(2):107-13. doi: 10.1007/s12223-013-0273-3. ISSN: 0015-5632
24. Pieragostino D, Agnifili L, Fasanella V, D'Aguanno S, Mastropasqua R, Di Ilio C, Sacchetta P, Urbani A, **Del Boccio P**. Shotgun proteomics reveals specific modulated protein patterns in tears of patients with primary open angle glaucoma naïve to therapy. *Mol Biosyst*. 2013 Jun;9(6):1108-16. doi: 10.1039/c3mb25463a. ISSN: 1742-206X
25. Pieragostino D, **Del Boccio P**, Di Ioia M, Pieroni L, Greco V, De Luca G, D'Aguanno S, Rossi C, Franciotta D, Centonze D, Sacchetta P, Di Ilio C, Lugaresi A, Urbani A. Oxidative modifications of cerebral transthyretin are associated with multiple sclerosis. *Proteomics*. 2013 Mar;13(6):1002-9. doi: 10.1002/pmic.201200395. Online ISSN: 1615-9861.
26. Vergara D, Simeone P, **Del Boccio P**, Toto C, Pieragostino D, Tinelli A, Acierno R, Alberti S, Salzet M, Giannelli G, Sacchetta P, Maffia M. Comparative proteome profiling of breast tumor cell lines by gel electrophoresis and mass spectrometry reveals an epithelial mesenchymal transition

- associated protein signature. *Mol Biosyst.* 2013 Jun;9(6):1127-38. doi: 10.1039/c2mb25401h. ISSN: 1742-206X.
27. Maenthaisong R, Tacconelli S, Sritara P, **Del Boccio P**, Di Francesco L, Sacchetta P, Archararit N, Aryurachai K, Patrignani P, Suthisang C. Clinical pharmacology of cyclooxygenase inhibition and pharmacodynamic interaction with aspirin by floctafenine in Thai healthy subjects. *Int J Immunopathol Pharmacol.* 2013 Apr-Jun;26(2):403-17. ISSN: 0394-6320.
28. **Del Boccio P**, Raimondo F, Pieragostino D, Morosi L, Cozzi G, Sacchetta P, Magni F, Pitto M, Urbani A. A hyphenated microLC-Q-TOF-MS platform for exosomal lipidomics investigations: application to RCC urinary exosomes. *Electrophoresis.* 2012 Feb;33(4):689-96. doi: 10.1002/elps.201100375. Online ISSN: 1522-2683
29. Vergara D, Simeone P, Toraldo D, **Del Boccio P**, Vergaro V, Leporatti S, Pieragostino D, Tinelli A, De Domenico S, Alberti S, Urbani A, Salzet M, Santino A, Maffia M. Resveratrol downregulates Akt/GSK and ERK signalling pathways in OVCAR-3 ovarian cancer cells. *Mol Biosyst.* 2012 Apr;8(4):1078-87. doi: 10.1039/c2mb05486h. ISSN: 1742-206X.
30. Pieragostino D, Bucci S, Agnifili L, Fasanella V, D'Aguanno S, Mastropasqua A, Ciancaglini M, Mastropasqua L, Di Ilio C, Sacchetta P, Urbani A, **Del Boccio P**. Differential protein expression in tears of patients with primary open angle and pseudoexfoliative glaucoma. *Mol Biosyst.* 2012 Apr;8(4):1017-28. doi: 10.1039/c1mb05357d. ISSN: 1742-206X.
31. **Del Boccio P**, Pieragostino D, Di Ioia M, Petrucci F, Lugaresi A, De Luca G, Gambi D, Onofri M, Di Ilio C, Sacchetta P, Urbani A. Lipidomic investigations for the characterization of circulating serum lipids in multiple sclerosis. *J Proteomics.* 2011 Nov 18;74(12):2826-36. doi: 10.1016/j.jprot.2011.06.023. ISSN: 1874-3919.
32. Pavone B, Bucci S, Sirolli V, Merlini G, **Del Boccio P**, Di Rienzo M, Felaco P, Amoroso L, Sacchetta P, Di Ilio C, Federici G, Urbani A, Bonomini M. Beta2-microglobulin causes abnormal phosphatidylserine exposure in human red blood cells. *Mol Biosyst.* 2011 Mar;7(3):651-8. doi: 10.1039/c0mb00137f. ISSN: 1742-206X.
33. Notturmo F, **Del Boccio P**, Luciani M, Caporale CM, Pieragostino D, Prencipe V, Sacchetta P, Uncini A. Monospecific high-affinity and complement activating anti-GM1 antibodies are determinants in experimental axonal neuropathy. *J Neurol Sci.* 2010 Jun 15;293(1-2):76-81. doi: 10.1016/j.jns.2010.03.003. ISSN: 0022-510X
34. Mantini D, Petrucci F, Pieragostino D, **Del Boccio P**, Sacchetta P, Candiano G, Ghiggeri GM, Lugaresi A, Federici G, Di Ilio C, Urbani A. A computational platform for MALDI-TOF mass spectrometry data: application to serum and plasma samples. *J Proteomics.* 2010 Jan 3;73(3):562-70. doi: 10.1016/j.jprot.2009.11.004. ISSN: 1874-3919.
35. Pieragostino D, Petrucci F, **Del Boccio P**, Mantini D, Lugaresi A, Tiberio S, Onofri M, Gambi D, Sacchetta P, Di Ilio C, Federici G, Urbani A. Pre-analytical factors in clinical proteomics investigations: impact of ex vivo protein modifications for multiple sclerosis biomarker discovery. *J Proteomics.* 2010 Jan 3;73(3):579-92. doi: 10.1016/j.jprot.2009.07.014. ISSN: 1874-3919.

36. Manuela Carchesio, Lucia Tonucci, Nicola d'Alessandro, Antonino Morvillo, **Piero Del Boccio** and Mario Bressan. Visible photostability of some ruthenium and platinumphthalocyanines in water and in the presence of organic substrates. *Journal of Porphyrins and Phthalocyanines* 2010; 14: 499-508. DOI: 10.1142/S1088424610002306. ISSN: 1088-4246.
37. Di Michele M, Della Corte A, Cicchillitti L, **Del Boccio P**, Urbani A, Ferlini C, Scambia G, Donati MB, Rotilio D. A proteomic approach to paclitaxel chemoresistance in ovarian cancer cell lines. *Biochim Biophys Acta*. 2009 Feb;1794(2):225-36. doi: 10.1016/j.bbapap.2008.09.017. ISSN: 1570-9639.
38. Carletti E, Sulpizio M, Bucciarelli T, **Del Boccio P**, Federici L, Di Ilio C. Glutathione transferases from Anguilla anguilla liver: identification, cloning and functional characterization. *Aquat Toxicol*. 2008 Oct 20;90(1):48-57. doi: 10.1016/j.aquatox.2008.07.015. ISSN: 0166-445X.
39. Candiano G, Bruschi M, Petretto A, Santucci L, **Del Boccio P**, Urbani A, Bertoni E, Gusmano R, Salvadori M, Scolari F, Ghiggeri GM. Proteins and protein fragments in nephrotic syndrome: Clusters, specificity and mechanisms. *Proteomics Clin Appl*. 2008 Jul;2(7-8):956-63. doi: 10.1002/prca.200780157. ISSN: 1862-8354.
40. Giovanni Candiano, Laura Cantucci, Andrea Petretto, Barbara Pavone, **Piero Del Boccio**, Luca Musante, Maurizio Bruschi, Giorgio Federici, Rosanna Gusmano, Andrea Urbani, Gian M. Ghiggeri. High-resolution 2-DE for resolving proteins, protein adducts and complexes in plasma. *Electrophoresis*. 2008 Feb;29(3):682-94. doi: 10.1002/elps.200700537. ISSN: 0173-0835
41. D'Aguzzo S, Barassi A, Lupisella S, d'Eril GM, **Del Boccio P**, Pieragostino D, Pallotti F, Carelli V, Valentino ML, Liguori R, Avoni P, Bernardini S, Gambi D, Urbani A, Federici G. Differential cerebro spinal fluid proteome investigation of Leber hereditary optic neuropathy (LHON) and multiple sclerosis. *J. Neuroimmunol*, 2007 Volume 193, Issue 1-2, Pages 156-160. doi: 10.1016/j.jneuroim.2007.10.004. ISSN: 0165-5728
42. Mantini D, Petrucci F, **Del Boccio P**, Pieragostino D, Di Nicola M, Lugaresi A, Federici G, Sacchetta P, Di Ilio C, Urbani A. Independent component analysis for the extraction of reliable protein signal profiles from MALDI-TOF mass spectra. *BIOINFORMATICS*. 2008 Jan 1;24(1):63-70. doi: 10.1093/bioinformatics/btm533. ISSN 1367-4803
43. D'Aguzzo S, **Del Boccio P**, Bernardini S, Ballone E, Di Ilio C, Federici G, Urbani A. Electrophoretic separations of cerebrospinal fluid proteins in clinical investigations. *Clin Chem Lab Med*. 2007;45(4):437-49. DOI: 10.1515/CCLM.2007.106. ISSN 14374331.
44. Mantini D, Petrucci F, Pieragostino D, **Del Boccio P**, Di Nicola M, Di Ilio C, Federici G, Sacchetta P, Comani S, Urbani A. LIMPIC: a computational method for the separation of protein MALDI-TOF-MS signals from noise. *BMC Bioinformatics*. 2007;8:101. doi: 10.1186/1471-2105-8-101. ISSN: 1471-2105
45. Musante L, Candiano G, Petretto A, Bruschi M, Dimasi N, Caridi G, Pavone B, **Del Boccio P**, Galliano M, Urbani A, Scolari F, Vincenti F, Ghiggeri GM. Active focal segmental glomerulosclerosis is associated with massive oxidation of plasma albumin. *J Am Soc Nephrol*. 2007 Mar;18(3):799-810. doi: 10.1681/ASN.2006090965. ISSN: 1046-6673

46. Bonomini M, Pavone B, Sirolli V, Del Buono F, Di Cesare M, **Del Boccio P**, Amoroso L, Di Ilio C, Sacchetta P, Federici G, Urbani A. Proteomics Characterization of Protein Adsorption onto Hemodialysis Membranes. *J Proteome Res.* 2006 Oct 6;5(10):2666-2674. DOI: 10.1021/pr060150u. ISSN: 1535-3893.
47. **Del Boccio P**, Pieragostino D, Lugaresi A, Di Ioia M, Pavone B, Travaglini D, D'Aguanno S, Bernardini S, Sacchetta P, Federici G, Di Ilio C, Gambi D, Urbani A. Cleavage of cystatin C is not associated with multiple sclerosis. *Ann Neurol.* 2007; 62: 201-204. DOI: 10.1002/ana.20968. ISSN: 0364-5134.
48. Candiano G, Musante L, Bruschi M, Petretto A, Santucci L, **Del Boccio P**, Pavone B, Perfumo F, Urbani A, Scolari F, Ghiggeri G. Repetitive Fragmentation Products of Albumin and {alpha}1-Antitrypsin in Glomerular Diseases Associated with Nephrotic Syndrome. *J Am Soc Nephrol.* 2006 Nov;17(11):3139-48. doi: 10.1681/ASN.2006050486. ISSN: 1046-6673
49. Greco M, Chiriaco F, **Del Boccio P**, Tagliaferro L, Acierno R, Menegazzi P, Pinca E, Pignatelli F, Storelli C, Federici G, Urbani A, Maffia M. A proteomic approach for the characterization of C677T mutation of the human gene methylenetetrahydrofolate reductase. *Proteomics.* 2006 Oct;6(19):5350-61. DOI: 10.1002/pmic.200600130. ISSN: 1615-9853
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