

CHIARA D'AMBROSIO

Curriculum Vitae

INFORMAZIONI PERSONALI/ PERSONAL INFORMATION

| | |
|---|--|
| Nome, Cognome/Name, Surname | CHIARA D'AMBROSIO |
| Address | 69, Viale dei Pini Sud - 80014 Giugliano in Campania (NA), Italy |
| House number, street name, postcode, city, country | |
| Telephone | +39 3470788606 (mobile) +39 0813340747 (home) +39 0815966006 (lab) |
| Fax | +39 0815965291 |
| E-mail | chiara.dambrosio@cnr.it |
| Website | www.ispaam.cnr.it |
| Nationality | Italian |
| Place and Date of birth | Napoli, 26/07/1975 |

ESPERIENZA PROFESSIONALE /WORK EXPERIENCE

| | |
|--------------------------------------|--|
| Se dipendente CNR indicare: | N. MATRICOLA 10739 QUALIFICA: RESEARCHER LIVELLO III |
| Dates (from – to) | From 2008 to nowdays |
| Name and address of employer | <i>Institute of Animal Production System in Mediterranean Enviroments (ISPAAM) National Research Council</i> 1085, Via Argine – 80147 Napoli, Italy |
| Type of business or sector | <i>Proteomics and Mass Spectrometry Laboratory</i> |
| Occupation or position held | <i>Researcher</i> |
| Main activities and responsibilities | . Proteomics and Mass Spectrometry |
| Dates (from – to) | From 2001 to 2008 |
| Name and address of employer | <i>Institute of Animal Production System in Mediterranean Enviroments (ISPAAM) National Research Council</i> 1085, Via Argine – 80147 Napoli, Italy |
| Type of business or sector | <i>Proteomics and Mass Spectrometry Laboratory</i> |
| Occupation or position held | <i>Research fellow</i> |
| Main activities and responsibilities | Proteomics and Mass Spectrometry |

EDUCATION AND TRAINING

| | |
|-------------------|------------|
| Dates (from – to) | 31/10/2001 |
|-------------------|------------|

| | |
|--|--|
| Name and type of organisation providing education and training | University of Naples "Federico II" |
| Principal subjects occupational skills covered | Student |
| Title of qualification awarded | Degree in Chemistry |
| Level in National classification | 109/110 |
| | |
| Dates (from – to) | 10-13/6/2013 |
| Name and type of organisation providing education and training | <i>Bruker Daltonics, Bremen, Germany</i> |
| Title of qualification awarded | <i>MALDI-TOF-MS operator Training Course Proteomics and ClinPoTools</i> |
| | |
| Dates (from – to) | 8-10/6/2010 |
| Name and type of organisation providing education and training | <i>University of Southern Denmark, Odense, Denmark</i> |
| Title of qualification awarded | <i>Bioinformatics in mass spectrometry based proteomics</i> |
| | |
| Dates (from – to) | 6-10/6/2009 |
| Name and type of organisation providing education and training | <i>Thermo Fisher Scientific</i> |
| Title of qualification awarded | <i>LTQ ETD Biotech Operation Training Course</i> |
| | |
| Dates (from – to) | 10-15/5/2009 |
| Name and type of organisation providing education and training | <i>COST training course at German Diabetes Center, Inst. of Clinical Biochemistry and Pathobiochemistry , Duesseldorf, Germany</i> |
| Title of qualification awarded | <i>Protein Rainbow Workshop. The Magic of DIGE</i> |

ATTIVITA' DI RICERCA / RESEARCH ACTIVITIES

Research sectors Proteomics and Mass Spectrometry. *Sample preparation for proteomic analysys; sample fractionation by electrophoresis, liquid chromatography, affinity chromatography; mass spectrometric analysys; data interpretation for protein identification and characterization; bioinformatic analysys.*

Recent Scientific Activities.

The research activity is focused on proteomics and structural characterization of proteins mainly involved in biomedical, agrofood and biotechnological sector. In particular, on proteome expression profile of animal tissues and biological fluids, of agrofood and pathogens microorganisms, and furthermore, of plants. In this area various differential proteomic investigation on human and animal tissues and biological fluids from treated/clinical samples were performed, identifying proteins involved in several physiological and pathological processes (liver tissues subjected to early ischemia/riperfusion injury during human liver transplantation, oxidative stress in human epithelial lens cells, thyroid cells, fibroblasts, osteoblasts and biopsy from breast lesions, amniotic fluid of women suffering from preeclampsia, plasma of veal calves administered with anabolic steroids). She was concerned to define bovine tissues and biological fluids proteomes, buffalo milk proteome, egg white proteome, and to analyse proteome of some bacteria of agrofood and clinical interest. She also performed various studies allowing proteomic characterization of agrofood plants like tomato, Annurca apple, mais, apricot and tobacco.

Moreover, Chiara D'Ambrosio was involved in characterization of post-translation modifications like phosphorylation, glycosylation, oxidation, in different proteins and bioactive peptides from different organisms. She was also involved in studies focused on protein interaction contributing to identification of constitutive elements in various protein complexes involved in different biological processes. She developed and applied various strategies for the conformational analysis of proteins and protein complexes based on the combined use of limited proteolysis, selective chemical modification, cross-linking experiments and mass spectrometric procedures. These methodologies allowed the definition of specific amino acid residues as well as topological regions on protein surface involved in macromolecular interaction.

Chiara D'Ambrosio is co-author of **71 scientific publications** printed on international journal with Impact Factor (**h-index=27** from Scopus, **h-index=29** from Google Scholar), and national and international congress contributions

- 1: Succio M, Comegna M, D'Ambrosio C, Scaloni A, Cimino F, Faraonio R. Proteomic analysis reveals novel common genes mediating both replicative and stress-induced senescence. *J Proteomics.* 2015 Jul 20. pii: S1874-3919(15)30066-X. doi:10.1016/j.jprot.2015.07.010. [Epub ahead of print] PubMed PMID: 26206181.
- 2: Bruschi M, Candiano G, Santucci L, D'Ambrosio C, Scaloni A, Bonsano M, Ghiggeri GM, Verrina E. Combinatorial Peptide Ligand Library and two dimensional electrophoresis: new frontiers in the study of peritoneal dialysis effluent in pediatric patients. *J Proteomics.* 2015 Feb 26;116:68-80. doi:10.1016/j.jprot.2015.01.003. Epub 2015 Jan 10. PubMed PMID: 25585130.
- 3: Salzano, A.M., Pauciullo, A., D'Ambrosio, C., Novi, G., Strazzullo, M., Scaloni, A. Bovine hemoglobin polymorphism: A novel alpha-globin variant identified in the Agerolese breed from southern Italy. *Czech Journal of Animal Science* 2015; 60, (4): 145-151
- 4: Mastrogiacomo R, D Ambrosio C, Niccolini A, Serra A, Gazzano A, Scaloni A, Pelosi P. An odorant-binding protein is abundantly expressed in the nose and in the seminal fluid of the rabbit. *PLoS One.* 2014 Nov 12;9(11):e111932. doi:10.1371/journal.pone.0111932. eCollection 2014. PubMed PMID: 25391153; PubMed Central PMCID: PMC4229146.
- 5: Comegna M, Succio M, Napolitano M, Vitale M, D'Ambrosio C, Scaloni A, Passaro F, Zambrano N, Cimino F, Faraonio R. Identification of miR-494 direct targets involved in senescence of human diploid fibroblasts. *FASEB J.* 2014 Aug;28(8):3720-33. doi: 10.1096/fj.13-239129. Epub 2014 May 13. PubMed PMID:24823364.
- 6: Bruschi M, Sinico RA, Moroni G, Pratesi F, Migliorini P, Galetti M, Murtas C, Tincani A, Madaio M, Radice A, Franceschini F, Trezzi B, Bianchi L, Giallongo A, Gatti R, Tardanico R, Scaloni A, D'Ambrosio C, Carnevali ML, Messa P, Ravani P, Barbano G, Bianco B, Bonanni A, Scolari F, Martini A, Candiano G, Allegri L, Ghiggeri GM. Glomerular autoimmune multicomponents of human lupus nephritis in vivo: α -enolase and annexin Al. *J Am Soc Nephrol.* 2014 Nov;25(11):2483-98. doi:10.1681/ASN.2013090987. Epub 2014 May 1. PubMed PMID: 24790181; PubMed Central PMCID: PMC4214525.
- 7: Antoniali G, Lirussi L, D'Ambrosio C, Dal Piaz F, Vascotto C, Casarano E, Marasco D, Scaloni A, Fogolari F, Tell G. SIRT1 gene expression upon genotoxic damage is regulated by APE1 through nCaRE-promoter elements. *Mol Biol Cell.* 2014 Feb;25(4):532-47. doi: 10.1091/mbc.E13-05-0286. Epub 2013 Dec 19. PubMed PMID:24356447; PubMed Central PMCID: PMC3923644.
- 8: Arena S, Salzano AM, Renzone G, D'Ambrosio C, Scaloni A. Non-enzymatic glycation and glycoxidation protein products in foods and diseases: an interconnected, complex scenario fully open to innovative proteomic studies. *Mass Spectrom Rev.* 2014 Jan-Feb;33(1):49-77. doi: 10.1002/mas.21378. Epub 2013 Sep 24. Review. PubMed PMID: 24114996.
- 9: Lucci V, Di Palma T, D'Ambrosio C, Scaloni A, Zannini M. AMOTL2 interaction with TAZ causes the inhibition of surfactant proteins expression in lung cells. *Gene.* 2013 Oct 25;529(2):300-6. doi: 10.1016/j.gene.2013.07.015. Epub 2013 Jul 31. PubMed PMID: 23911299.
- 10: Coppola V, Coppola M, Rocco M, Digilio MC, D'Ambrosio C, Renzone G, Martinelli R, Scaloni A, Pennacchio F, Rao R, Corrado G. Transcriptomic and proteomic analysis of a compatible tomato-aphid interaction reveals a predominant salicylic acid-dependent plant response. *BMC Genomics.* 2013 Jul 29;14:515. doi:10.1186/1471-2164-14-515. PubMed PMID: 23895395; PubMed Central PMCID:
- PMC3733717.
- 11: D'Agostino M, Lemma V, Chesi G, Stornaiuolo M, Cannata Serio M, D'Ambrosio C, Scaloni A, Polishchuk R, Bonatti S. The cytosolic chaperone α -crystallin B rescues folding and compartmentalization of misfolded multispan transmembrane proteins. *J Cell Sci.* 2013 Sep 15;126(Pt 18):4160-72. doi: 10.1242/jcs.125443. Epub 2013 Jul 10. PubMed PMID: 23843626.
- 12: Monteleone F, Rosa R, Vitale M, D'Ambrosio C, Succio M, Formisano L, Nappi L, Romano MF, Scaloni A, Tortora G, Bianco R, Zambrano N. Increased anaerobic metabolism is a distinctive signature in a colorectal cancer cellular model of resistance to antiepidermal growth factor receptor antibody. *Proteomics.* 2013 Mar;13(5):866-77. doi: 10.1002/pmic.201200303. Epub 2013 Jan 24. PubMed PMID:23281225.
- 13: D'Ambrosio C, Arena S, Rocco M, Verrillo F, Novi G, Viscosi V, Marra M, Scaloni A. Proteomic analysis of apricot fruit during ripening. *J Proteomics.* 2013 Jan 14;78:39-57. doi: 10.1016/j.jprot.2012.11.008. Epub 2012 Nov 23. PubMed PMID: 23178875.
- 14: Lirussi L, Antoniali G, Vascotto C, D'Ambrosio C, Poletto M, Romanello M, Marasco D, Leone M, Quadrifoglio F, Bhakat KK, Scaloni A, Tell G. Nucleolar accumulation of APE1 depends on charged lysine residues that undergo acetylation upon genotoxic stress and modulate its BER activity in cells. *Mol Biol Cell.* 2012 Oct;23(20):4079-96. doi: 10.1091/mbc.E12-04-0299. Epub 2012 Aug 23. PubMed PMID: 22918947; PubMed Central PMCID: PMC3469522.
- 15: Chiaradia E, Pepe M, Tartaglia M, Scopetta F, D'Ambrosio C, Renzone G, Avellini L, Moriconi F, Gaiti A, Bertuglia A, Beccati F, Scaloni A. Gambling on putative biomarkers of osteoarthritis and osteochondrosis by equine synovial fluid proteomics. *J Proteomics.* 2012 Jul 19;75(14):4478-93. doi: 10.1016/j.jprot.2012.02.008. Epub 2012 Feb 15. PubMed PMID: 22361695.
- 16: Santucci L, Candiano G, Bruschi M, D'Ambrosio C, Petretto A, Scaloni A, Urbani A, Righetti PG, Ghiggeri GM. Combinatorial peptide ligand libraries for the analysis of low-expression proteins: Validation for normal urine and definition of a first protein MAP. *Proteomics.* 2012 Feb;12(4-5):509-15. doi:10.1002/pmic.201100404. Epub 2012 Jan 19. Review. PubMed PMID: 22246922.
- 17: Candiano G, Santucci L, Bruschi M, Petretto A, D'Ambrosio C, Scaloni A, Righetti PG, Ghiggeri GM. "Cheek-to-cheek" urinary proteome profiling via combinatorial peptide ligand libraries: A novel, unexpected elution system. *J Proteomics.* 2012 Jan 4;75(3):796-805. doi: 10.1016/j.jprot.2011.09.018. Epub 2011 Oct 1. PubMed PMID: 21982829.
- 18: Spadaro G, D'Orio C, Genovese A, Galeotaefiore A, D'Ambrosio C, Di Giovanni S, Vitale M, Capasso M, Lamberti V, Scaloni A, Marone G, Zambrano N. Proteomic analysis of sera from common variable immunodeficiency patients undergoing replacement intravenous immunoglobulin therapy. *J Biomed Biotechnol.* 2011;2011:706746. doi: 10.1155/2011/706746. Epub 2011 Sep 22. PubMed PMID: 21960740; PubMed Central PMCID: PMC3180879.
- 19: Vascotto C, Bisetto E, Li M, Zeef LA, D'Ambrosio C, Domenis R, Comelli M, Delneri D, Scaloni A, Altieri F, Mavelli I, Quadrifoglio F, Kelley MR, Tell G. Knock-in reconstitution studies reveal an unexpected role of Cys-65 in regulating APE1/Ref-1

- subcellular trafficking and function. Mol Biol Cell. 2011 Oct;22(20):3887-901. doi: 10.1091/mbc.E11-05-0391. Epub 2011 Aug 24. PubMed PMID:21865600; PubMed Central PMCID: PMC3192867.
- 20: Amodio G, Moltedo O, Monteleone F, D'Ambrosio C, Scaloni A, Remondelli P, Zambrano N. Proteomic signatures in thapsigargin-treated hepatoma cells. Chem Res Toxicol. 2011 Aug 15;24(8):1215-22. doi: 10.1021/tx200109y. Epub 2011 Jul 1. PubMed PMID: 21692457.
 - 21: Bernardini G, Laschi M, Serchi T, Arena S, D'Ambrosio C, Braconi D, Scaloni A, Santucci A. Mapping phosphoproteins in Neisseria meningitidis serogroup A. Proteomics. 2011 Apr;11(7):1351-8. doi: 10.1002/pmic.201000406. Epub 2011 Feb 17. PubMed PMID: 21365747.
 - 22: Santarosa M, Del Col L, Viel A, Bivi N, D'Ambrosio C, Scaloni A, Tell G, Maestro R. BRCA1 modulates the expression of hnRNPA2B1 and KHSRP. Cell Cycle. 2010 Dec 1;9(23):4666-73. Epub 2010 Dec 1. PubMed PMID: 21099359; PubMed Central PMCID: PMC3048036.
 - 23: Fantini D, Vascotto C, Marasco D, D'Ambrosio C, Romanello M, Vitagliano L, Pedone C, Poletto M, Ceseratto L, Quadrifoglio F, Scaloni A, Radicella JP, Tell G. Critical lysine residues within the overlooked N-terminal domain of human APE1 regulate its biological functions. Nucleic Acids Res. 2010 Dec;38(22):8239-56. doi: 10.1093/nar/gkq691. Epub 2010 Aug 10. PubMed PMID: 20699270; PubMed Central PMCID: PMC3001066.

ADDITIONAL INFORMATION

- In charge of research activity of the ISPAAM Commessa AG.P01.015 – “Metodologie genomiche e proteomiche applicate al sistema zootecnico e agroindustriale” (prot. N. 711 del 10/4/2015)
- Member of examination board for the selection of a research fellow at ISPAAM (bando ISPAAM-AS-001-2013-NA) in the research project C.A.R.I.N.A. on “Miglioramento genetico del bufalo mediante selezione citogenetica e biochimica dei riproduttori, mappaggio fisico di geni di interesse zootecnico ed analisi proteomica dei corrispettivi prodotti genici” (prot. 1066 del 10/09/2013)
- Member of examination board for the selection of a research fellow at ISPAAM (bando ISPAAM-AS-001-2012-NA) in the research project MEdical Research in Italy on “Metodologie di proteomica per lo sviluppo di nuove molecole come potenziali strumenti per la diagnosi e la terapia di tumori solidi” (prot. 578 del 07/05/2012)
- Member of examination board for the selection of a research fellow at ISPAAM (bando ISPAAM-001-2010-NA) in the research project PRIN-Bando MIUR 2008 on “Metodologie proteomiche applicate allo studio dei processi di sopravvivenza e riparo del DNA in cellule trasformate” (prot. 303 del 07/10/2010)
- Representative of researchers and technologists as member of Consiglio d'Istituto dell'ISPAAM (prot. 328 del 9/7/2009)
- Member of examination board for the selection of a research fellow at ISPAAM (bando AR083.000.2008.01) in the research project “Caratterizzazione strutturale di proteine da Plasmodium Falciparum” (prot. 167 del 22/9/2008)
- Member of Società Italiana di Proteomica (ITPA).

**TRATTAMENTO DEI DATI
PERSONALI, INFORMATIVA E
CONSENSO**

Il D.Lgs 30/06/2003, n. 196 "Codice in materia di protezione dei dati personali" regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all'identità personale e al diritto di protezione dei dati personali; l'interessato deve essere previamente informato del trattamento.

La norma in considerazione intende come "trattamento" qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l'organizzazione, la conservazione, la consultazione, l'elaborazione, la modifica, la selezione, l'estrazione, il raffronto, l'utilizzo, l'interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente *curriculum vitae* e nella documentazione della quale fa parte integrante, sollevandolo da ogni responsabilità e autorizzandolo alla pubblicazione, sul sito web del CNR, della relazione inerente alle proprie ricerche svolte nell'ambito del Progetto finanziato dal CNR. Inoltre acconsento all'aggiornamento delle informazioni intranet che mi riguardano sia relative le pubblicazioni sia alle ricerche svolte.

The Undersigned hereby authorises the CNR to utilize and store the personal sensitive data contained in the attached Curriculum Vitae for the purposes of bilateral Joint research projects and within the framework of the Data protection Act No. 196, dates 30 June 2003 as promulgated by the Italian Government.

(barrare la casella)

Si, acconsento

Chiara Dambroni