

WORK EXPERIENCE

2019 - 2021 **Post-doc fellowship**

University of Perugia

Project title "Lipidomics and personalized medicine".

The research is about untargeted approach to different pathological conditions in order to obtain new data on targets and biomarkers for a clinical relevance of lipidomics.

Academic

2018-2019 **Post-doc fellowship**

University of Perugia

Project title "Lipidomic profiles of breast cancer: an unexplored way for personalized treatment".

The research activity was carried out in the mass spectrometry laboratory of Prof. Cruciani. Various breast cancer cell lines, provided by the Mario Negri Research Institute, were analyzed in order to obtain their lipid profile in relation to various treatments carried out and / or to their resistance to some drugs, with the aim of identifying target cells for the development of methods to combat the disease.

Academic

2016- 2018 **Post-doc fellowship**

University of Perugia

Research activity for a post-doc Project: "DEVELOPMENT OF ANALYTICAL PROCEDURES FOR LIPIDOMICS".

Study of the lipid fingerprint of human serum in order to investigate potential biomarkers for stroke,  
Serum analysis for evaluation of natural therapies concerning fatty liver  
Serum analysis for the study of ovarian cancer biomarkers  
Autophagy induced nervous cell analysis,  
Analysis of liver cells for drug metabolism,  
Analysis of nervous cells induced to differentiate towards the dopaminergic model,  
Analysis of nervous cells for the study of biomarkers for Parkinson's,  
Analysis of human sebum samples for reference models  
Analysis for bladder cancer biomarkers  
Analysis for assessing the impact of environmental pollution

Academic

2013 – 2015 **Postgraduate research scholarship**

Regione Umbria

Project entitled

"CORRELATION BETWEEN BLOOD LIPID FOOTPRINT AND INCIDENCE OF NEURODEGENERATIVE DISEASES. DEVELOPMENT OF A NON-INVASIVE AND CHEAP METHOD TO REDUCE THE COSTS OF REGIONAL PUBLIC HEALTH".

Development of lipid extraction protocols from human serum, validation of chemical-analytical methods for lipidomics, use of LC / MS QTOF instrumentation, use of LCMS analysis management software and software for lipidomics analysis and statistical analysis.

2010 **Post-graduate research scholarship**

University of Perugia

Project entitled "Evaluation of the ecotoxicological aspects of the freshwater macrobenthic invertebrates and their use as bioindicators" at the Dept. of Animal Biology and Ecology, University of Perugia

Academic

2008– 2009 **Post-doc fellowship**

University of Perugia

Project on the malformations of aquatic insect larvae as bioindicators of the environmental status of water bodies. Chemical and physico-chemical analyzes on waters and sediments. Preparation and analysis of biological material, observation and analysis. Drafting of protocols concerning the use of the parameter of morphological alterations as a bioindicator of environmental quality. Sampling of water bodies under investigation. Tools used: optical microscope, atomic absorption in flame, GC / MS.

Academic

2008-2009 **Laboratory technician**

Regione Umbria research scholarship

SEIT s.r.l.

Chemical and chemical-physical analyzes on environmental matrices, organization and drafting of the final reports.

Sector of waste disposal and waste water of agricultural and livestock origin, land reclamation, safety in the workplace by controlling dust and chemical pollutants. Process control and environmental monitoring on waste treatment plants and landfills. The activities carried out during this period consist in: digestion of samples for the analysis of metals, determination of anions (fluorides, chlorides, nitrates, phosphates, sulphates), COD, TOC, BOD5, total nitrogen, ammonia nitrogen, phosphorus, phenols, humic and fulvic acids, hydrocarbons (C <12, C > 12), cyanides, determination of total solids, total volatile solids, suspended solids, volatile suspended solids. The most used instruments were: ion chromatograph (anionic and cationic), ICP OEM (optical plasma for heavy metals), TOC (organic carbon analyzer).

**2004-2007 Research activity for the PhD in Biology and Ecology**

University of Perugia

During the PhD course:

Member of the working group for the drafting of the Management Plans of Natura 2000 sites in Umbria (applications of European Directives for protected species, SCI and SPA). Specific application of the Guidelines, verification of the absence of target species in the sites identified as priorities, analysis of the state of the populations, drafting of guidelines for the protection and safeguarding of the same.

Member of the working group within the agreement between the Department of Animal Biology and Ecology of the University of Perugia and the Ministry of Education, University and Research (MIUR) for the research project entitled "Alternate guests of parasites of freshwater fish fauna: natural environments and farms ". In the two years of activity, parasites belonging to the phylum Myxozoa have been identified in some oligochetes found in different biotopes of the Umbrian Valnerina area.

Teaching support for Lessons as part of the exercises of the Ecology II course for students of the Master's Degree in Biology and Environment (class 6 / S)

**EDUCATION AND TRAINING**

18/05/2012 **Degree in Environmental Chemistry - (110/110 cum laude)**

2004/2007 **PhD in Biology and Ecology (achieved on 27/02/2008)**

Thesis Title: Le malfomazioni dei Chironomidi (Dipetra) come bioindicatori delle acque interne. Sampling in inland water environments. Biological analyzes on insect larvae. Chemical analysis (heavy metals with atomic absorption spectrophotometer and pesticides with gas mass) of water and sediments. Experimental induction with heavy metals and pesticides of malformations in the laboratory according to the protocol OECD 218 GUIDELINES FOR THE TESTING OF CHEMICALS. Statistical analysis and data processing.

As part of the research project relating to the PhD he spent a period at the University of Amsterdam, Department of Ecology and Ecotoxicology, with which he collaborated for experimental induction studies of malformations for the validation of a new laboratory protocol.

16/07/2004 **Degree in Natural Sciences - (110/110 cum laude)**

**PERSONAL SKILLS**

Mother tongue(s) Italian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
Common European Framework of Reference for Languages

Communication skills ▪ good communication skills gained through my professional experiences

Organisational / managerial skills	Ability to work in a team acquired over the years as a member of research groups. Autonomous ability to organize work, even in stressful situations and according to deadlines, defining priorities for achieving the set objectives. Coordination capacity of working groups.
Job-related skills	Use of the main laboratory tools for chemical and biological analysis.
Other skills	I practiced competitive artistic gymnastics (national) and competitive horse riding (national).
Driving licence	B

#### ADDITIONAL INFORMATION

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##### Main publications in lipidomic field

ALICE CARTONI MANCINELLI , ALESSANDRA DI VEROLI, SIMONA MATTIOLI , GABRIELE CRUCIANI, ALESSANDRO DAL BOSCO , CESARE CASTELLINI. Lipid metabolism analysis in liver of different chicken genotypes and impact on nutritionally relevant polyunsaturated fatty acids of meat. *Scientific Reports* volume 12, Article number: 1888 (2022). <https://doi.org/10.1038/s41598-022-05986-2>.

MAURIZIO GIANNI', LAURA GORACCI, ANNA SCHLÄFLI, ALESSANDRA DI VEROLI, MAMI KUROSAKI, LUCA GUARRERA, MARCO BOLIS, MARIKA FOGLIA, MONICA LUPI, MARIO TSCHAN, GABRIELE CRUCIANI, MINEKO TERAQ, ENRICO GARATTINI. Role of cardiolipins, mitochondria and autophagy in the differentiation process activated by all-trans retinoic acid in acute promyelocytic leukemia. *Cell Death & Disease* volume 13, Article number: 30 (2022). <https://doi.org/10.1038/s41419-021-04476-z>.

DARIA CAPECE, DANIEL D'ANDREA, FEDERICA BEGALLI, LAURA GORACCI, LAURA TORNATORE, JAMES L. ALEXANDER, ALESSANDRA DI VEROLI, SHI-CHI LEOW, THAMIL S. VAIYAPURI, JAMES K. ELLIS, 1,7 DANIELA VERZELLA, JASON BENNETT, LUCA SAVINO, YUE MA, JAMES S. MCKENZIE, MARIA LUISA DORIA, SAM E. MASON, KERN REI CHNG, HECTOR C. KEUN, GARY FROST, VINAY TERGAONKAR, KATARZYNA BRONIOWSKA, WALTER STUNKEL, ZOLTAN TAKATS, JAMES M. KINROSS, GABRIELE CRUCIANI, AND GUIDO FRANZOSO. Enhanced triacylglycerol catabolism by carboxylesterase 1 promotes aggressive colorectal carcinoma. *J Clin Invest.* 2021;131(11):e137845. <https://doi.org/10.1172/JCI137845>.

TERAO M.; GORACCI L.; CELESTINI V.; KUROSAKI M.; BOLIS M.; DI VEROLIA.; VALLERGAA.; FRATELLI M.; LUPI M.; CORBELLI A.; FIORDALISO F.; GIANNI M.; PARONI G.; ZANETTI A.; CRUCIANI G.; GARATTINI E. Role of mitochondria and cardiolipins in growth inhibition of breast cancer cells by retinoic acid. *Journal of Experimental & Clinical Cancer Research* (2019) 38:436 <https://doi.org/10.1186/s13046-019-1438-y>.

ARRIBAS J.A., NAPOLI S., GAUDIO E., CASCIONE L., DI VEROLIA., TARANTELLI C., SPRIANO F., ZUCCHETTO A., ROSSI F., RINALDI F., STATHIS A., STUSSI G., GATTEI V., CRUCIANI G., ZUCCA E., ROSSI D., BERTONI F. Mechanisms of secondary resistance to Idelalisib in marginal zone lymphoma. *Hematological Oncology*. Volume37, IssueS2. Supplement: 15th International Conference on Malignant Lymphoma Palazzo dei Congressi, Lugano, Switzerland, 18–22 June, 2019.

PIERANGELO TORQUATO, DANILO GIUSEPPONI, ANNAALISI, ROBERTA GALARINI, DESIRÉE BARTOLINI, MARTA PIRODDI, LAURA GORACCI, ALESSANDRA DI VEROLI, GABRIELE CRUCIANI, ANNALISA CRUDELE, VALERIO NOBILI & FRANCESCO GALLI. Nutritional and lipidomics

biomarkers of docosahexaenoic acid-based multivitamin therapy in pediatric NASH. *Scientific Reports* volume 9, Article number: 2045 (2019).

ARRIBAS J.A., NAPOLI S., GAUDIO E., CASCIONE L., DI VEROLIA., TARANTELLI C., SPRIANO F., ZUCCHETTO A., ROSSI F., RINALDI F., STATHIS A., STUSSI G., GATTEI V., CRUCIANI G., ZUCCA E., ROSSI D., BERTONI F. Secreted factors determine resistance to idelalisib in marginal zone lymphoma models of resistance. American Society of Hematology Annual Meeting. 605. Molecular Pharmacology, Drug Resistance—Lymphoid and Other Diseases: Poster II.

CARTONI MANCINELLI A., DI VEROLIA., COTOZZOLO E., DAL BOSCO A., CASTELLINI C., MATTIOLI S. Fatty acid profile in liver of different poultry genetic strains. XVIII European Symposium on the quality of Poultry meat 23-26 June 2019 Cesme-Izmir.

GORACCI L., TORTORELLA S., TIBERI P., PELLEGRINO R.M., DI VEROLIA., VALERIA., CRUCIANI G. Lipostar, a Comprehensive Platform-Neutral Cheminformatics Tool for Lipidomics. *Anal. Chem.* 2017, 89, 6257–6264.

CRUCIANI G., PELLEGRINO RM, DI VEROLIA, CATALDI S, MAROCCO D, COSTANTINI E, SIDONI A, VIOLA-MAGNI M. Diagnostic application of lipidomics fingerprints to bladder carcinoma. *Transl Cancer Res* 2017;6(6):1197-1206. doi: 10.21037/tcr.2017.11.11

PELLEGRINO R., DI VEROLIA., VALERIA., GORACCI L., CRUCIANI G. LC/MS lipid profiling from human serum: a new method for global lipid extraction. *Anal Bioanal Chem* 2014, 406 (30):7937-48.

#### Other scientific publications

DI VEROLIA., SELVAGGI R, GORETTI E. Chironomid mouthpart deformities as indicator of environmental quality: a case study in Lake Trasimeno (Italy). *JOURNAL OF ENVIRONMENTAL MONITORING*, ISSN: 1464-0325

DI VEROLIA., E. GORETTI, M. L.PAUMEN, M.H.S. KRAAK, W. ADMIRAAL (in stampa). Induction of mouthpart deformities in chironomid larvae exposed to contaminated sediments. *ENVIRONMENTAL POLLUTION*, ISSN: 0269-7491

DI VEROLIA., ROBERTA SELVAGGI, ENZO GORETTI (2012). Chironomid mouthpart deformities as indicator of environmental quality: a case study in Lake Trasimeno (Italy). *JOURNAL OF ENVIRONMENTAL MONITORING*, vol. 14; p. 1473-1478, ISSN: 1464-0325, doi: 10.1039/c2em10882h

DI VEROLIA., ENZO GORETTI, MIRIAM LEON PAUMEN, MICHIEL H.S. KRAAK, WIM ADMIRAAL (2012). Induction of mouthpart deformities in chironomid larvae exposed to contaminated sediments. *ENVIRONMENTAL POLLUTION*, vol. 166; p. 212-217, ISSN: 0269-7491

GAINO E., RAGNI B., DI VEROLIA., PALLOTTINI M., PAGGI G., DI GIULIO A. M., CHIODINI E., SPILINGA C., GORETTI E. (2014). How to face swarming of pestiferous chironomids (Diptera) at Lake Trasimeno. *Proceedings of the 15th World Lake Conference*, 426.

PALLOTTINI M., PAGLIARINI S., DI VEROLIA., D'ONOFRIO M., VITA G., CARDENES J., DI GIULIO A.M., GORETTI E. (2014). Monitoring of the littoral chironomid populations of Lake Trasimeno (2005-2013). *Atti del 75° Congresso dell'Unione Zoologica Italiana*.

- PALLOTTINI M., DI VEROLI A., SANTORO F., SELVAGGI R., SCARDAZZA F., CAPPELLETTI D., GORETTI E. (2013). Deformities of *Chironomus riparius* Meigen, 1804 larvae and heavy metal contamination in a stream of central Italy. *Atti del 74° Congresso dell'Unione Zoologica Italiana*, 97.
- PALLOTTINI M., PIVOTTI I., D'ALLESTRO V., FABRIZI A., DI VEROLI A., LUNA M., GORETTI E., GAINO E. (2012). Lepidoptera of community interest in Natura 2000 Sites of Umbria. *Atti del 73° Congresso dell'Unione Zoologica Italiana*, 108.
- PALLOTTINI M., F. SANTORO, F. LUCHETTI, V. D'ALLESTRO, DI VEROLI A., A. FABRIZI, R. SELVAGGI, R. PELLEGRINO, D. CAPPELLETTI, E. GORETTI (2011). Bioindicazione della comunità a macroinvertebrati del bacino del Fiume Nestore (Umbria). In: *Atti 72° Congresso Unione Zoologica Italiana*, p. 159.
- LUCHETTI F., SANTORO F., PALLOTTINI M., D'ALLESTRO V., DI VEROLI A., FABRIZI A., SELVAGGI R., PELLEGRINO R., CAPPELLETTI D., GORETTI E. (2011). Bioaccumulo in *Anodonta anatina* (Bivalvia) del Fiume Nestore (Umbria). . In: *Atti XXI Società Italiana di Ecologia*, p. 214.
- PIVOTTI I, M COZZARI, V. D'ALLESTRO, DI VEROLI A., A FABRIZI, M LUNA, E GORETTI (2011). Ampliamento dell'area di distribuzione di *Melanargia arge* (Lepidoptera, Satyridae) in Umbria. In: *Proceedings 23° Congr. Naz. Ital. Ent.*, p. 74.
- GORETTI E., COLETTA A., DI VEROLI A., DI GIULIO A. M., GAINO E. (2011). Artificial light device for attracting pestiferous chironomids (Diptera): A case study at Lake Trasimeno (Central Italy). *THE ITALIAN JOURNAL OF ZOOLOGY*; p. 336-342, ISSN: 1125-0003
- DI VEROLI A., SELVAGGI R., PELLEGRINO R.M., GORETTI E. (2010). Sediment toxicity and deformities of chironomid larvae in Lake Piediluco (Central Italy). *CHEMOSPHERE*, vol. 79; p. 33-39, ISSN: 0045-6535
- GABRIELLI I., I.PIVOTTI, A. COLETTI, A.FABRIZI, DI VEROLI A., C.MARCUCCI, V.D'ALLESTRO, E.GORETTI (2009). Lepidotteri ropaloceri del Sito Natura 2000 "Lago di Chiusi" (Siena). In: *Proceedings 22° Congr. Naz. Ital. Ent.*, p. 77-77.
- D'ALLESTRO V., A. FABRIZI, DI VEROLI A., I. PIVOTTI, A.J.M. DÖRR, E. GORETTI (2009). Distribuzione di *Austropotamobius italicus* e *Potamon fluviatile* nei "Siti Natura 2000" della Regione Umbria (Italia centrale). In: *Atti XIX Società Italiana di Ecologia*. Bolzano, 15-18 settembre 2009.
- PIVOTTI I., DI VEROLI A., FABRIZI A., D'ALLESTRO V., MAGIONAMI C., MARCUCCI C., COLETTA A., GORETTI E. (2008). La lepidotterofauna della "Direttiva Habitat" nei Siti Natura 2000 della Regione Umbria. In: *Atti XVIII Società Italiana di Ecologia*. Parma, 1-3 settembre 2008, p. 130.
- DI VEROLI A., GORETTI E., MARCUCCI C., FABRIZI A., SCOPETTA L., DI GIOVANNI M.V. (2008). Incidence of larvae mouthpart deformities in *Chironomus plumosus* and *Procladius* sp. from Piediluco Lake, Italy . *BOLETIM DO MUSEU MUNICIPAL DO FUNCHAL*; p. 13-20, ISSN: 0870-3876
- MARCUCCI C, E. GORETTI, DI VEROLI A., FABRIZI A., DI GIOVANNI M.V. (2008). Actinosporeans of Myxozoan parasites of oligochaetes from Nera River basin, Central Italy. *PARASSITOLOGIA*, vol. 49; p. 1-3, ISSN: 0048-2951
- COLETTA A., MAGIONAMI C., DI VEROLI A., FABRIZI A., MARCUCCI C., PIVOTTI I., D'ALLESTRO V., DI GIOVANNI M.V., GAINO E.R., GORETTI E., DI GIULIO A.M. (2008). Il controllo dei Chironomidi (Ditteri) al Lago Trasimeno: impiego della diversione luminosa. . In: *Atti 69° Congresso Unione Zoologica Italiana*. Senigallia (AN), 22-25 Settembre 2008

DI VEROLIA A., GORETTI E., FABRIZIA A., MARCUCCI C., COLETTI A., DI GIOVANNI M.V., DI GIULIO A.M. (2007). Chironomidi (Diptera) della zona litorale del Lago Trasimeno. In: Atti 68° Congresso Unione Zoologica Italiana. Lecce, 24-27 settembre 2007, p. 100

DI VEROLIA A., GORETTI E., FABRIZIA A., MARCUCCI C., COLETTI A., DI GIOVANNI M.V., MEARELLI M., GAINO E.R., DI GIULIO A.M. (2007). Monitoraggio delle popolazioni a Chironomidi del Lago Trasimeno sottoposte a trattamento con *Bacillus thuringiensis* var. *israelensis*. In: Atti Congresso congiunto Associazione Italiana di Oceanologia e Limnologia – XVII Società Italiana di Ecologia. Ancona, 17-20 settembre 2007, p. 1-5

MARCUCCI C., CAFFARA M., DI VEROLIA A., FABRIZIA A., DI GIOVANNI M.V., GORETTI E. (2007). Occurrence of actinosporean stages (Myxozoa) in the Nera River system (Umbria: Central Italy). In: Atti 7th International Symposium on Fish Parasites (ISFP VII). Viterbo, 24-28 Settembre 2007, p. 159.

FABRIZIA A., GORETTI E., MARCUCCI C., DI VEROLIA A., SCOPETTA L., DI GIOVANNI M.V., SELVAGGI R., CEREGHINO R. (2007). Influence of intensive fish farming on macroinvertebrate community structure in Appenine streams (Italy). In: Atti Symposium for European Freshwater Sciences SEFS5. Palermo, 8-13 Luglio 2007, p. 201.

DI VEROLIA A., E GORETTI, A FABRIZI, C MARCUCCI, A COLETTI, MV DI GIOVANNI, AM DI GIULIO (2007). Chironomidi (Diptera) della zona litorale del Lago Trasimeno. In: Atti 68° Congresso Unione Zoologica Italiana.

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MARCUCCI C., GORETTI E., DI VEROLIA A., FABRIZIA A., GAGLIARDINI S., DI GIOVANNI M.V. (2006). Componente ad oligocheti in due laghi dell'Italia centrale: Lago Trasimeno e Lago di Piediluco. In: Atti 67° Congresso Nazionale dell'Unione Zoologica Italiana. Napoli, 12-15 settembre 2006, p. 83-84

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FABRIZIA A., GORETTI E., MARCUCCI C., DI VEROLIA A., SCOPETTA L., DI GIOVANNI M.V. (2005). Impatto dell'attività di trocicoltura sulla comunità a macroinvertebrati dei corsi d'acqua della Valnerina (Umbria). In: -. Proceedings 15° Congr. Naz. S.It.E. p. 1-5

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MARCUCCI C, GORETTI E, DI VEROLIA A., FABRIZIA A, DI GIOVANNI MV (2005). Indagine sulla presenza di actinospore di Mixozoi parassiti di Oligocheti nel bacino del Fiume Nera (Italia Centrale). In: Atti 66° Congresso Nazionale Unione Zoologica Italiana

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DI VEROLIA., GORETTI E., MARCUCCI C., FABRIZIA., DI GIOVANNI M.V. (2005). Malformazioni dell'apparato boccale in larve di chironomidi (Diptera: Chironomidae) in tre laghi dell'Italia centrale. In: 20° Congresso Nazionale Italiano Entomologia. Assisi, 13-18 Giugno 2005

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