

### **ELIA Antonia Concetta**

*Research Group: Biodiversity & Ecology*

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**Current position-** Permanent Researcher (Assistant Professor, SSD BIO/07-Ecology) at the Department of Chemistry, Biology and Biotechnology, University of Perugia, Via Elce di Sotto, 06123 Perugia, Italy.

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### **Education**

Jan. 31, 2014. National Scientific Qualification (Abilitazione Scientifica Nazionale, 2012) as Associate Professor of Ecology (05-C1-Ecologia).

Oct. 12, 1995. PhD degree in Experimental Medicine, Department of Experimental Medicine and Biochemical Science, University of Perugia.

Oct. 30, 1989. "Laurea" (Master's Degree) in Biological Sciences at the University of Perugia.

### **Professional Training**

Jan 1, 2004-present. Permanent Researcher (Assistant Professor of Ecology,) at the Department of Chemistry, Biology and Biotechnology (formerly Department of Cellular and Environmental Biology).

1999-2004. Lab Technician (V level) at the Department of Animal Biology and Ecology, University of Perugia.

2006. Contract employment for professional services associated with the use of equipment provided at the Institute of Hydrobiology and Pisciculture, University of Perugia.

1997-1999. Post-Doctoral fellow (E13X Applied Biology, Prof. Giovanni Principato) at the Institute of Biology and Genetics, University of Ancona (UNIVPM).

1996. CNR Scholarship "CNR program: mobility of short-term fellowships, year 1995" June 1996.

1995. Sponsored researcher non Faculty at the Department of Biological Science, Division of Biochemistry, University of North Texas (March-July).

1994. Sponsored researcher non Faculty. Dept Biological Science, Div. Biochem. Un. North Texas (Jan.-Dec.).

1992. Intensive English Language "Attendance for level 3 communication, II Fall 1992" at the University of North Texas.

1992. Attendances for the Courses of Microscopy and Confocal Microscopy and Workshop on Tunnel Effect and Atomic Force (S.I.M.E. and G.I.C. Perugia, 7-10 April).

1992. Sponsored research scholar at the Department of Biological Science (Prof. Scott Norton), Division of Biochemistry, University of North Texas (Aug-Dec).

1991. Summer School for a Multidisciplinary Assessment. Environmental Risks for Human Health, University of Siena and CNR (October 7-19).

1990-1994. PhD student in Experimental Medicine (4 years), Department of Experimental Medicine and Biochemical Science, Universities of Perugia and Ancona.

1989-1990- Graduate Internship at the Ecology Institute of the University of Perugia.

1986-1989- Undergraduate Internship at the Zoology Institute of the University of Perugia.

### **Teaching: Courses at the University of Perugia**

2011- present. Ecology (8 CFU) for Biological Science degree course.

2010- present. Applied Ecology (6 CFU) for master degree course in "Biomolecular Applied Sciences".

2009-2011. Ecology (9 CFU) for Biological Science degree course.

2008-2009. SSIS "VIII Ciclo" A059-A060, 12 hours.

2007-2008. SSIS "VIII Ciclo A059-A060, 16 hours.

2005-2009. Ecology II (3 CFU) of master degree course in "Biology and Environment", of Biological Science.

2004-2009. Ecotoxicology (3 CFU) for Biological Science degree and Ecotoxicology II (3 CFU) of master degree course in "Biology and Environment".

2004-2008. Course of Ecotoxicology for Environmental Chemistry degree (6 CFU).

### **Invited lectures**

2014. "II^ Corso di aggiornamento per medici veterinari, tecnici di laboratorio e della prevenzione che operano nel settore ittico)", IZSPLV Turin.

2014. master course "Acquacoltura e Igiene delle Produzioni Ittiche" degree, Cesenatico, University of Bologna.

2013. master course "Acquacoltura e Igiene delle Produzioni Ittiche" degree, Cesenatico, University of Bologna.

2012. "CITE Seminar Series". Department of Bioanalytical Ecotoxicology, UFZ, Leizing, Germany (Stefan Scholtz) . November, 1.

### **Doctoral activity as Researcher**

2013-present. Member of the Board of Professors (Collegio di Dottorato) of the PhD course in Biotechnology.  
2010-2012. Supervisor for PhD student of the Lab Radioecology and Ecotoxicology (LRE), Inst. Radioprotection Nuclear Saf (IRSN) (Simon Olivier) , Saint-Paul-Lez-Durance  
2009-2010. Supervisor for PhD student at the University of Campobasso in "Biochimica e Chimica Applicate" University of Campobasso.  
2010. External Member of Doctoral Committee for final exam in "Biochimica e Chimica Applicate", University of Campobasso.  
2006-2014. Tutor for PhD students of the PhD course in "Biologia e Ecologia" at the University of Perugia.  
2011-2014. Member of Doctoral Committee (Commissione interna) in "Biologia e Ecologia", University of Perugia  
2004-2014. Committee Member of the Board of Professors (Collegio di Dottorato) of the PhD course in "Biologia e Ecologia".

### **Other**

2014-present. Member of the Teaching Committee (Commissione didattica) of the Department of Chemistry, Biology and Biotechnology  
2012-2013. Member of Paritetic Committee (Commissione paritetica) for Biological Sciences course.  
2011 -2013. Member of Teaching Committee (Commissione didattica) for master course in Applied Biomolecular Science.  
2006-2010. Committee Member of " Comitato di Area 05".  
2004-2013. Committee Member of " Giunta di Dipartimento, Biologia Cellulare e Ambientale".  
2004-2009. Member of Teaching Committee (Commissione didattica) for Biological Sciences course (LS Biologia e Ambiente).  
2004-2006. Committee member of "Fondo per la Ricerca di Base, Dipartimento di Biologia Cellulare e Ambientale".  
2004-present. Member of the Professional Society: SiTE, AIOL, Ittiopatologia, ECOTOX.  
2002-present. Responsible for First Aid.

### **International Experiences**

2014. Visiting Scientist at Chefs des services Microbiologie - Virologie et Biologie Moléculaire - Pôle REcherche, Labéo Frank Duncombe, Caen (12-15th December) to collaborate in projects on mollusc farming.  
2012. Invited scientist at the Laboratory of Radioecology and Ecotoxicology, Institute of Radioprotection and Nuclear Safety (IRSN/DEI/SECRe/LRE), Saint-Paul-Lez-Durance, France, 12-14 January to participate in the PhD thesis committee of Simone Al kaddissi (chairs Prof. P Couture and Prof L. Giambérini).  
2007. Invited Scientist at the Institute of Food and Agricultural Sciences and the College of Agriculture and Life Sciences, University of Florida, USA (February-March) to collaborate in plankton projects (Framework cultural agreement, Univ. Perugia and Univ. Florida).  
1996. CNR Scholarship "CNR program: mobility of short-term fellowships, year 1995" at the Department of Biological Science, University of North Texas (TX, USA), June.  
1995. Sponsored researcher non Faculty at the Dept Biological Science, Div. Biochem. University of North Texas (March-July).  
1994. Sponsored researcher non Faculty. Dept Biological Science, Div. Biochem. Un. North Texas (January-December).  
1992. Sponsored research scholar at the Department of Biological Science (Prof. Scott Norton), Division of Biochemistry, University of North Texas (Aug-December).

### **Scientific collaborations**

*Khan Farhan*, Department of Environmental, Social and Spatial Change (ENSPAC), Roskilde University, Roskilde, Denmark; *Maryline Houssin*, Chefs des services Microbiologie - Virologie et Biologie Moléculaire-Pôle REcherche, Labéo Frank Duncombe, Caen; *Renate Reimschuessel* Food and Drug Administration (FDA), Laurel (MD, USA); *Wendy Andersen*, Food and Drug Administration (FDA), Denver (CO, USA); *Simon Olivier*, Laboratory of Radioecology and Ecotoxicology, Institute of Radioprotection and Nuclear Safety (IRSN/DEI/SECRe/LRE), Saint-Paul-Lez-Durance, France; *Karl Havens*, Institute of Food and Agricultural Sciences and the College of Agriculture and Life Sciences, University of Florida, USA; *Lawrence E Battoe*, St. Johns River Water Management District Maitland, FL, USA. *Stefan Scholz*, Department of Bioanalytical Ecotoxicology, Helmholtz Centre for Environmental Research GmbH, Leipzig/Germany; *Tom Waller*, University of North Texas, Institute of Applied Sciences, Texas, USA; *Scott Norton*, University of North Texas, Department of Biology Sciences, Division of Biochemistry, Texas, USA; *Maria Cesarina Abete*, National Reference for Surveillance and Monitoring Animal Feed (IZSPLV, Torino), *Marino Prearo*, Istituto Zooprofilattico Piemonte, Liguria e Valle D'Aosta (IZSPLV, Torino); *Roberta Galarini* Istituto Zooprofilattico Umbria- Marche (IZSUM, Perugia); *Letizia Fioravanti*, Dept. Veterinary Science, Alma Mater Studiorum, University of Bologna; *Massimiliano*

*Scalici*, Department of Sciences, University of Roma Tre; *Anna Maria Picco* Department of Earth Science and Environment, University of Pavia; *Laura Gasco*, DISAFA of University of Torino.

#### **Reviewer for scientific journals**

Aquatic Toxicology, Chemosphere; Fish Physiology and Biochemistry; Ecotoxicology and Environmental Safety; PLOS ONE; Ecotoxicology; Biological Invasion; Environmental Toxicology and Pharmacology; Marine Ecology Progress Series; Environmental Science & Technology; Applied Organometallic Chemistry; Integrated Environmental Assessment and Management Wiley Online library; Journal Marine Biology; Pharmacology Research; Agricultural Science Research Journal; Idrobiologia, Ittiopatologia.

**Awards:** N,S-Bis-Fmoc-glutathione, Bachem Americas (Peptides and Biochemicals, <http://shop.bachem.com/ep6sf/prodB2855.html>; Elia et al., 1995).

**Prize:** ISI Gold. XII congresso Nazionale SIDiLV, Genova 2010. <http://www.sidilv.org/index.php/premi-e-borse-di-studio>.

#### **Research projects**

2012-2017. Framework cultural agreement, Univ. Perugia and Univ. Florida (Havens K.) (PI, Elia AC).  
2012-2014. Oxidative stress, nano- and bulk-sized silver in aquatic invertebrates (in coll. with Farhan Khan, ENSPAC, Roskilde University).  
2014. Current research IZSPLV 2013 (Ministero della Salute): (OU. PI, Elia AC).  
2013. "Lenza Etrusca-Lago di Chiusi" (PI, Elia AC).  
2012-present. LTER Italy and LifeWatch.  
2012. "ThyssenKrupp Acciai Speciali Terni, Umbria (PI, Elia AC).  
2010-2014. Oxidative stress, uranium and cadmium in aquatic invertebrates (in coll. with Olivier Simon (IRSN/DEI/SECRe/LRE, France).  
2008-2012. Current research IZSPLV (Ministero della Salute): IZSPLV11/2007; IZSPLV12/08; IZSPLV21/08; IZS8RC21; IZS8RC12; IZSPLV 10/09; IZSPLV 11C17 (PI of Univ. Perugia, Elia AC).  
2008-2009. "ARPA Umbria" (PI, Elia AC).  
2010. "Fondazione Cassa di Risparmio di Perugia" (PI, Cenci Goga B., University of Perugia).  
2007-2012. Framework cultural agreement, Univ. Perugia and Univ. Florida (Havens K.) (PI, Elia AC).  
2006; 2008; 2012. "Fondazione Cassa di Risparmio Perugia" (PI, Gaino E.).  
2005-2009. Current research IZSPLV (Ministero della Salute): IZSPLV2003; IZSPLVCC; IZSPLVC8 (PI of Univ. Perugia, Taticchi MI.).  
2003-2005. MIUR (PI. Orecchia P., University of Rome, Tor Vergata, Resp. OU Taticchi MI.).  
2001-2003. MURST (40%; PI. Monarca Silvano, University of Perugia).  
1999-2001. MURST (40%; PI. Monarca Silvano, University of Brescia).  
1999. "Progetto Ateneo" (PI, Gaino E. University of Perugia).  
1999. Province of Terni (PI, Taticchi MI. University of Perugia).  
1998; 2002; 2006. Province of Perugia (PI, Taticchi MI. University of Perugia).  
1997-1999. MURST (ex 40%; PI. Focardi S., University of Siena, Resp. OU Taticchi MI.).  
1996-1998. MURST (ex 40%; PI. Della Croce N., University of Genova, Resp. OU Taticchi MI.).  
1996; 1998. Current research "IZSUM" 9/1996; "IZSUM" 7/1998.  
1991-1994; 1996-1997. Research projects (60% Mantilacci L, Mearelli M., University of Perugia).

#### **ISI papers**

1. Cozzari M, Elia AC, Pacini N, Smith BD, Boyle D, Rainbow PS, Khan FR (2015). Bioaccumulation and oxidative stress responses measured in the estuarine ragworm (*Nereis diversicolor*) exposed to dissolved, nano- and bulk-sized silver. Environ Poll, 198: 32-40.
2. Al Kaddissi S, Olivier S, Elia AC, Gonzalez P, Floriani M, Cavalie I, Camilleri V, Frelon S, Legeay A. (2014). How toxic is the depleted uranium to crayfish *Procambarus clarkii* compared with cadmium? Environ Toxicol. Article first published online: 12 SEP 2014 DOI: 10.1002/tox.22036.
3. Al Kaddissi S, Legeay A, Elia AC, Gonzalez P, Floriani M, Cavalie I, Massabuau J-C, Gilbin R, Simon S. (2014). Mitochondrial gene expression, antioxidant responses, and histopathology after cadmium exposure. Environ Toxicol 29(8):893-907.
4. Pacini N, Dörr AJM, Elia AC, Scoparo M., Abete MC, Prearo M (2014). Melamine-cyanurate complexes and oxidative stress markers in trout kidney following melamine and cyanuric acid long-term co-exposure and withdrawal. Fish Physiol Biochem. 40( 5): 1609-1619

5. Elia AC, Abete MC, Pacini N, Dörr AJM, Scanzio T, Prearo M (2014). Antioxidant biomarker survey ensuing long-term selenium withdrawal in *Acipenser baeri* fed Se-cysteine diets. Environ Toxicol Pharmacol. 37:1131-1139.
6. Elia AC, Ciccotelli V, Pacini N, Dörr AJM, Gili M, Natali M, Gasco L, Prearo M, Abete MC (2014). Transferability of oxytetracycline (OTC) from feed to carp muscle and evaluation of the antibiotic effects on antioxidant systems in liver and kidney. Fish Physiol Biochem. 40(4):1055-68.
7. Boggero A, Basset A, Austoni M, Barbone E, Bartolozzi, L., Bertani I., Cattaneo A, Cianferoni F, Corriero G., Dörr AJM, Elia AC, Ficetola GF, Kamburska L., LA Porta G, Lauceri S, Ludovisi A, Gaino E, Goretti E, Lorenzoni M, Manca M, Marchetto A., Morabito G, Marzano FN, Oggioni A, Pierri C, Riccardi N, Rossetti G, Ungaro N., Volta P., Zaupa S, Fontaneto D. (2014) Weak effects of habitat type on susceptibility to invasive freshwater species: an Italian case study. Aquat Cons: Mar Freshw Ecosys. 42(6): 841-852.
8. Dörr AJM, Abete MC, Prearo M, Pacini N, La Porta G, Natali M, Elia AC, (2013). Effects of selenium supplemented diets on growth and condition indexes in juvenile red swamp crayfish, *Procambarus clarkii*. Environ Toxicol Pharmacol. 36: 484-492.
9. Pacini N., Elia AC, Abete MC, Dörr AJM, Brizio P, Gasco L, Righetti M, Prearo M, (2013). Antioxidant response versus selenium accumulation in the liver and kidney of the Siberian sturgeon (*Acipenser baeri*). Chemosphere 93 (10): 2405-2412.
10. Pacini N, Prearo M, Abete MC, Brizio P, Dörr AJM, Reimschuessel R, Andersen W, Gasco L, Righetti M, Elia AC, (2013). Antioxidant Responses and Renal Crystal Formation in Rainbow Trout Treated with Melamine Administered Individually or in Combination with Cyanuric Acid. J Toxicol Environ Health A 76(8): 491-508.
11. Al Kaddissi S, Legeay A, Elia AC, Gonzalez P, Camilleri V, Gilbin R, Simon O,(2012). Effects of uranium on crayfish *Procambarus clarkii* mitochondria and antioxidants responses after chronic exposure: What have we learned?. Ecotoxicol Environ Safe. 78: 218-224.
12. Al Kaddissi S, Frelon S, Elia AC, Legeay A, Gonzalez P, Coppin F, Orjollet D, Camilleri V, Beaugelin-Seiller K, Gilbin R (2012). Are antioxidant and transcriptional responses useful for discriminating between chemo- and radiotoxicity of uranium in the crayfish *Procambarus clarkii*? Ecotox Environ Safe. 80: 266-272
13. Dörr AJM, Elia AC, Rodolfi M, Garzoli L, Picco AM, D'amen M, Scalici M (2012). A model of co-occurrence: segregation and aggregation patterns in the mycoflora of the crayfish *Procambarus clarkii* in Lake Trasimeno (central Italy). J Limnol. 71: 135-143.
14. Dörr AJM, Rodolfi M, Elia AC, Scalici M, Garzoli L, Picco AM (2012). Mycoflora on the cuticle of the invasive crayfish *Procambarus clarkii*. Fund Appl Limnol. 180/1: 77-84.
15. Pacini N, Abete MC, Dörr AJM, Prearo M, Natali M, Elia AC (2012). Detoxifying response in juvenile tench fed by selenium diet. Environ Toxicol Pharmacol. 33. 46-52.
16. Prearo M, Pacini N, Abete MC, Benedetto A, Dörr AJM, Elia AC (2012). Changes of the detoxifying responses in melamine-treated rainbow trout. J Vet Pharm Therap. 35: 94-95.
17. Taticchi MI, Elia AC, Todini C, Prearo M (2011). *Plumatella trasimenica* and *Plumatella timwoodi* two new species, belonging to 'repens group', from Central Italy (Bryozoa: Phylactolaemata, Plumatellidae). Invert Syst. 25: 444-453.
18. Elia AC, Prearo M, Pacini N, Dörr AJM, Abete MC (2011). Effects of selenium diets on growth, accumulation and antioxidant response in juvenile carp. Ecotox Environ Safe. 74: 166-173.
19. Rubini A, Pieroni G, Elia AC, Zippilli L, Paolocci F, Taticchi MI (2011). Novel morphological and genetic tools to discriminate species among the family Plumatellidae (Phylactolaemata, Bryozoa). Hydrobiologia 664:81-93.
20. Villarini M, Moretti M, Dominici L, Fatigoni C, Dörr AJ, Elia AC, Monarca S (2011). A protocol for the evaluation of genotoxicity in bile of carp (*Cyprinus carpio*) exposed to lake water treated with different disinfectants. Chemosphere 84: 1521-1526.
21. Benedetto A, Squadrone S, Prearo M, Elia AC, Giorgi I, Abete MC (2011). Evaluation of ABC efflux transporters genes expression in kidney of rainbow trout (*Oncorhynchus mykiss*) fed with melamine and cyanuric acid diets. Chemosphere 84: 727-730.
22. Dörr AJM, Rodolfi M, Scalici M, Elia AC, Garzoli L, Picco AM (2011). *Phoma glomerata*, a potential new threat to Italian inland waters. J Nat Cons. 19: 370-373.
23. Elia AC, Dörr AJM, Abete MC, Prearo M (2010). Seasonal variability of detoxificant response and heavy metal accumulation in tissues of both sexes in *Tinca tinca* (L.) from Lake Trasimeno. Rev Fish Biol Fish. 20: 425-434.
24. Taticchi MI, Elia AC, Battie L, Havens KE (2009). First report about freshwater Bryozoa of Florida (Lake Apopka) . It J Zool. 76:194-200.
25. Havens KE, Elia AC, Taticchi MI, Fulton III RS (2009). Zooplankton-phytoplankton relationships in shallow subtropical vs. temperate lakes Apopka (Florida, USA) and Trasimeno (Umbria, Italy). Hydrobiologia 628:165-175.
26. Prearo M., Squadrone S., Elia A.C., Pascale M., Tarasco R., Giorgi I., Dörr A.J.M., Abete M.C. (2009). Acute Toxicity in wild brown trout (*Salmo trutta*) following iron pollution in Dora Baltea River (Aosta Valley, North-Western Italy). J Vet Pharm Therap. 32: 185-186.

27. Dörr AJM, Pacini N, Abete MC, Prearo M, AC Elia (2008). Effects of a selenium-enriched diet on antioxidant response in adult crayfish (*Procambarus clarkii*). Chemosphere 73: 1090-1095.
28. Elia AC, Fanetti A, Dörr AJM, Taticchi MI (2008). Effects of concentrated drinking water on glutathione and glutathione-dependent enzymes in *Cyprinus carpio* L. Chemosphere 72: 791-796.
29. Taticchi MI, Pieroni G., Elia AC (2008). First finding of *Plumatella vairiiae* (Hastings, 1929)(Bryozoa, Phylactolaemata) in Europe. It J Zool. 75: 411-416.
30. Elia AC, Dörr AJM, Taticchi MI, Prearo M, Abete MC (2007). Detoxification enzymes of freshwater crayfish *Procambarus clarkii* fed a diet enriched in selenium: Preliminary results. Mar Freshw Behav Physiol. 40: 195-199.
31. Elia AC, Galarini R, Dörr AJM, Taticchi MI (2007). Heavy metal contamination and antioxidant responses of a freshwater bryozoan (*Lophopus crystallinus* Pall., Phylactolaemata). Ecotox Environ Safe. 66: 188-194.
32. Elia AC, Dörr AJM, Galarini R (2007). Comparison of organochlorine pesticides, PCBs and heavy metal contamination and of detoxifying response in tissues of *Amerius melas* from Corbara, Alviano and Trasimeno Lakes, Italy. Bull Environ Contam Toxicol. 78: 463-468.
33. Elia AC, Galarini R, Dörr AJM, Taticchi MI (2006). Bioaccumulation of heavy Metals, organochlorine pesticides and detoxificant biochemical Indexes in tissues of *Ictalurus melas* of Lake Trasimeno. Bull Environ Contam Toxicol. 76: 132-139.
34. Elia AC, Anastasi V, Dörr AJM (2006). Hepatic antioxidant enzymes and total Glutathione of *Cyprinus carpio* exposed to three disinfectants, chlorine dioxide, sodium hypochlorite and peracetic acid, for superficial water potabilization. Chemosphere 64: 1633-1641.
35. Elia AC, Dörr AJM, Mastrangelo C, Prearo M, Abete MC (2006). Glutathione and antioxidant enzymes in the hepatopancreas of crayfish *Procambarus clarkii* (Girard, 1852) of Lake Trasimeno (Italy). BFPP. Bull Français Pêche Prot Milieux Aquat, 380-381, 1351-1361.
36. Elia AC, Galarini R, Dörr AJM, Carnevali O, Fioroni L, Taticchi MI (2005). Polychlorinated biphenyls and antioxidant enzymes in liver of *Cyprinus carpio* L. from Lake Trasimeno. It J Zool. 72: 1-7.
37. Elia AC, Galarini R, Taticchi MI, Dörr AJM, Mantilacci L (2003). Antioxidant responses and bioaccumulation in *Ictalurus melas* under mercury exposure. Ecotox Environ Safe. 55:162-167.
38. Carnevali O, Mosconi G, Cardinali M, Elia AC, Habibi HR, Polzonetti-Magni AM (2003). Validation of an enzyme linked immunosorbent assay (ELISA) for *Cyprinus carpio* L. vitellogenin, as a biomarker of reproductive disorders. Chem Ecol. 19: 5-13.
39. Galarini R, Haouet M, Elia AC (2002). Heavy metals, HCB and p,p'-DDE in *Ictalurus melas* Raf. from Trasimeno and Corbara lakes, Italy. Bull Environ Contam Toxicol. 68: 230-236.
40. Elia AC., Waller WT, Norton SJ (2002). Biochemical responses of bluegill sunfish (*Lepomis macrochirus*, Rafinesque) to Atrazine Induced Oxidative stress. Bull Environ Contam Toxicol 68:809-816.
41. Elia AC, Ludovisi A, Taticchi MI (2001). Study of seasonal variations of glutathione and detoxificant enzymes in *Lophopus crystallinus* Pallas (Bryozoa) from Lake Piediluco (Umbria, Italy). It J Zool. 68: 291-297.
42. Elia AC, Mantilacci L, Natali M, Principato G (2000). Association of glutathione peroxidase activity with an acidic glutathione S-transferase in carp liver. It J Zool. 67: 39-43.
43. Elia AC, Mantilacci L, Taticchi MI, Principato G (1999). Characterization of the major glutathione transferases in carp liver. J Exp Zool. 284: 130-136.
44. Elia AC, Chyan MK, Principato GB, Rosi G, Giovannini E, Norton S (1995). N,S-Bis-Fluorenylmethoxycarbonylglutathione: a new, very potent inhibitor of mammalian glyoxalase II. Biochem Mol Biol Intern. 35: 763-771.
45. Chyan MK, Elia AC, Principato G, Giovannini E, Rosi G, Norton SJ (1995). S-Fluorenylmethoxycarbonylglutathione and diesters: inhibition of mammalian glyoxalase II. Enzym Prot. 40:164-173.
46. Norton SJ, Elia AC, Chyan MK, Gillis G, Frenzel C, Principato GB (1993). Inhibitors and Inhibition studies of mammalian glyoxalase II activity. Biochem Soc Trans. 21: 545-549.

### **Chapter books**

47. Elia AC, Todini C, Di Brizio M, Taticchi MI, (2012). Struttura e composizione del popolamento fitoplanctonico del Lago Trasimeno negli ultimi 50 anni. In: a cura di Martinelli Angiolo. Tutela ambientale del lago Trasimeno. p. 89-99, PERUGIA: Arpa Umbria, ISBN: 9788890592003.
48. Prearo M., Squadrone S., Elia A.C., Gavinelli S., Tarasco R., Minardi D., Dörr A.J.M., Abete M.C. (2010). Wild salmonids in Italian northwest inland waters: cadmium, mercury and lead pollution. In: Ecotoxicology around the Globe. p. 339-348, Julia E. Visser, Nova Science Publishers, Inc., ISBN: 9781617611261
49. Dörr A.J.M., Pacini N., Abete M.C., Prearo M., Righetti M., Elia A.C. (2010). Antioxidant response, heavy metal and selenium accumulation in juvenile and adult *Procambarus clarkii* of both sexes from Lake Trasimeno. In: Ecotoxicology around the Globe. p. 325-328, Julia E. Visser. Nova Science Publishers, Inc., ISBN: 9781617611261

50. Prearo M., Squadrone S., Elia A.C., Giorgi I., Tarasco R., Dörr A.J.M., Abete M.C. (2010). Iron pollution in Dora Baltea River (Valle D'Aosta, North-Western Italy): a case of acute toxicity in wild brown trout (*Salmo trutta trutta*). In: Ecotoxicology around the Globe. p. 349-358, Julia E. Visser Nova Science Publishers, Inc, ISBN: 9781617611261
51. Elia A.C., Dörr A.J.M., Zippilli L., Prearo M. (2009). Antioxidant response of farmed *Oncorhynchus mykiss* affected by Proliferative Kidney Disease (PKD). In: Ecotoxicology Research Developments. p. 187-203, New York: Eduardo B. Santos Nova Science Publisher, ISBN: 9781608765621
52. Dörr A.J.M., Elia A.C. (2009). Detoxifying enzymes of *Dreissena polymorpha* treated with disinfectants, chlorine dioxide, sodium hypochlorite and peracetic acid, for superficial water potabilization. In: -. Ecotoxicology Research Developments. p. 301-314, New York: Eduardo B. Santos Nova Science Publisher, ISBN: 9781606921678
53. Elia A.C., Dörr A.J.M., Prearo M., Abete M.C. (2007). Seasonal effects on antioxidant response and metal accumulation of *Dreissena polymorpha*. In: Edit by Francesca Gherardi. Biological invaders in inland waters: profiles, distribution and threats. vol. 2, p. 613-623, Dordrecht: Springer.
54. Elia A.C., Dörr A.J.M., Mantilacci L., Taticchi M.I., Galarini R. (2000). Effects of mercury on glutathione and glutathione-dependent enzymes in catfish (*Ictalurus melas* R.). In: Market B.; Friese K. TRACE Elements Their Distribution And Effects In The Environment. vol. 4, p. 411-421, Oxford:-London: Applied Science Publishers. - Elsevier Applied Science.

#### **Research activity**

Dr Elia AC coordinates the laboratory of Ecotoxicology and the laboratory of Planktology and Bryozoology of the Department of Chemistry, Biology and Biotechnology. The research area concerns: 1)Biomarkers of contaminant-mediated oxidative stress in freshwater organisms -Integrated biochemical and molecular assessment of environmental stress and animal welfare. 2) Freshwater Plankton: biology and ecology of phytoplankton and zooplankton. Eutrophication and toxic algae. 3)Freshwater Bryozoa: biology, ecology, morphological taxonomy and molecular characterization.

She coauthored 46 original articles in international ISI journal, 8 book chapters, 17 original articles in national and international non ISI journal and 95 conference proceedings (January 2015).