

PERSONAL INFORMATION

Alberto Mantovani

WORK EXPERIENCE

January 2007–Present

Resrach director

Istituto Superiore di Sanità, (Italy)

Scientific activity at the Italian National Health Institute (Istituto Superiore di Sanità, ISS)

Director of the Food and Veterinary Toxicology Unit. Co-ordination of the food toxicology activities at the ISS. The unit's activities pivot on in vivo and in vitro reproductive, developmental and juvenile toxicology.

(funded by DG Research).

Risk assessment activities at the European Food Safety Authority (EFSA)

member of EFSA FEEDAP Panel (feed additives and substances used in animal feeds) on 2003-12; on 2007-12 I as external expert in the working groups on Trace Elements and Vitamins in feeds; since July 2012 I am member of EFSA Panel on plant protection products and their residues (PPR) and of the EFSA Standing Working Group on Emerging Risks,

January 1992–December 2006

Senior scientist

Istituto Superiore di Sanità, (Italy)

I have worked till 2003 in the laboratory of Comparative Toxicology and Ecotoxicology and afterwards at the newly established Department of Food and Animal Health, since 2006 Dept of Veterinary Public Health and Food Safety. During this period I co-ordinated a unit on reproductive and developmental toxicology with special focus on endocrine disruptors: since 2000 I co-ordinated the first national project on endocrine disruptors, whose activities have been disseminated through the website <http://www.iss.it/inte>.

I participated to a number of international risk assessment activities: Safety of Residues Working Party (veterinary drug residues at EMA (1994-9), OECD working on endocrine disruptors testing and assessment (2000-9); EFSA FEEDAP Panel (2003-onward see above);

I co-chaired the Technical Working Group "Endocrine Disruptors" within SCALE project (2002-2003) - EU Environment and Health strategy

April 1985–December 1991

junior scientist

Istituto Superiore di Sanità, (Italy)

Organizing a unit on in vivo reproductive and developmental toxicology- External expert of the National toxicological Commission, and of the National Commission on pesticides

EDUCATION AND TRAINING

October 1981–October 1982

MSc

University of Edinburgh, (United Kingdom)

Veterinary public health

October 1974–November 1978

DVM

University of Bologna, (Italy)

Veterinary Medicine

ADDITIONAL INFORMATION

Expertise

Veterinary and food toxicology; reproductive/developmental toxicology; juvenile toxicology; risk assessment of veterinary drug residues

Publications LIST OF INTERNATIONAL PAPERS 2006-2014

Peer-reviewed papers

- 1) Calamandrei G, Maranghi F, Venerosi A, Alleva E, Mantovani A. (2006). Efficient testing strategies for evaluation of xenobiotics with neuroendocrine activity. *Reprod Toxicol.* 22: 164-74.
- 2) Carbone P, Giordano F, Nori F, Mantovani A, Taruscio D, Lauria L, Figa-Talamanca I. (2006) Cryptorchidism and hypospadias in the Sicilian district of Ragusa and the use of pesticides. *Reproductive Toxicology.* 22: 8-12.
- 3) Carbone P, Giordano F, Nori F, Mantovani A, Taruscio D, Lauria L, Figa-Talamanca I. (2006) The possible role of endocrine disrupting chemicals in the aetiology of cryptorchidism and hypospadias: a population-based case-control study in rural Sicily. *Int J Androl.* 30: 3-13.
- 4) La Rocca C, Mantovani A. From environment to food: the case of PCB. *Ann Ist Super Sanita.* 2006;42(4):410-6.
- 5) Mantovani A. (2006) Risk assessment of endocrine disrupters. The role of toxicological studies. *Ann. N.Y. Acad. Sci.* 1076: 239-252
- 6) Mantovani A, Maranghi F, Purificato I, Macrì A. (2006) Assessment of feed additives and contaminants: an essential component of food safety. *Ann Ist Super Sanita.* 42(4):427-32.
- 7) Carbone P, Giordano F, Nori F, Mantovani A, Taruscio D, Lauria L, Figa-Talamanca I. (2007) The possible role of endocrine disrupting chemicals in the aetiology of cryptorchidism and hypospadias: a population-based case-control study in rural Sicily. *Int J Androl.* 30: 3-13
- 8) Clementi M, Causin R, Marzocchi C, Mantovani A, Tenconi R. (2007) A study of the impact of agricultural pesticide use on the prevalence of birth defects in northeast Italy. *Reprod Toxicol.* 24(1):1-8.
- 9) Frazzoli C, Dragone R, Mantovani A, Massimi C, Campanella L. (2007) Functional toxicity and tolerance patterns of bioavailable Pd(II), Pt(II), and Rh(III) on suspended *Saccharomyces cerevisiae* cells assayed in tandem by a respirometric biosensor. *Anal Bioanal Chem.* 389: 2185-94.
- 10) Maranghi F, Rescia M, Macri C, Di Consiglio E, De Angelis G, Testai E, Farini D, De Felici M, Lorenzetti S, Mantovani A. (2007) Lindane may modulate the female reproductive development through the interaction with ER-beta: an in vivo-in vitro approach. *Chem Biol Interact.* 169:1-14.
- 11) Baldi F, Mantovani A. (2008) A new database for food safety: EDID (Endocrine disrupting chemicals - Diet Interaction Database). *Ann Ist Super Sanita.* 44: 57-63.
- 12) Caserta D, Maranghi L, Mantovani A, Marci R, Maranghi F, Moscarini M. (2008) Impact of endocrine disruptor chemicals in gynaecology. *Hum Reprod Update.* 14(1):59-72.
- 13) Giordano F, Carbone P, Nori F, Mantovani A, Taruscio D, Figa-Talamanca I. (2008) Maternal diet and the risk of hypospadias and cryptorchidism in the offspring. *Paediatric and Perinatal Epidemiology.* 22:249-260.
- 14) Mantovani A, Maranghi F, La Rocca C, Tiboni GM, Clementi M. (2008) The role of toxicology to characterize biomarkers for agrochemicals with potential endocrine activities. *Reprod Toxicol.* 26(1):1-7.
- 15) Maranghi F, Tassinari R, Moracci G, Macri C, Mantovani A. (2008) Effects of a low oral dose of diethylstilbestrol (DES) on reproductive tract development in F1 female CD-1 mice. *Reprod Toxicol.* 26(2):146-50.
- 16) Salvatore M, Lorenzetti S, Maranghi F, Mantovani A, Taruscio D (2008). Molecular link(s) between hepatoblastoma pathogenesis and exposure to di-(2-ethylhexyl)phthalate: a hypothesis. *Folia Medica* 50(4):17-23
- 17) Santini F, Mantovani A, Cristaudo A, Rago T, Marsili A, Buselli R, Mignani A, Ceccarini G, Bastillo R, Taddei D, Ricco I, Vitti P, Pinchera A. (2008) Thyroid function and exposure to styrene. *Thyroid.* 18(10):1065-9.
- 18) De Angelis S, Tassinari R, Maranghi F, Eusepi A, Di Virgilio A, Chiarotti F, Ricceri L, Venerosi Pesciolini A, Gilardi E, Moracci G, Calamandrei G, Olivieri A, Mantovani A. (2009) Developmental exposure to chlorpyrifos induces alterations in thyroid and thyroid hormone levels without other toxicity signs in cd1 mice. *Toxicol Sci.* 108(2):311-9.
- 19) Frazzoli C, Petrini C., Mantovani A. (2009) Sustainable development and next generation's health: a long-term perspective about the consequences of today's activities for food safety. *Annali Ist Sup. Sanita* 45(1):65-75.
- 20) Magrelli A, Azzalin G, Salvatore M, Viganotti M, Tosto F, Colombo T, Devito R, Di Masi A, Antoccia A, Lorenzetti S, Maranghi F, Mantovani A, Tanzarella C, Macino G, Taruscio D. (2009) Altered

- microRNA Expression Patterns in Hepatoblastoma Patients. *Transl Oncol.* 2:157-63.
- 21) Mantovani A, Frazzoli C, La Rocca C. (2009) Risk assessment of endocrine-active compounds in feeds. *Vet J.* 182, 392-401.
- 22) Tait S, Ricceri L, Venerosi A, Maranghi F, Mantovani A, Calamandrei G. (2009) Long-Term Effects on Hypothalamic Neuropeptides Following Developmental Exposure to Chlorpyrifos in Mice. *Environ Health Perspect* 117:112-116.
- 23) Di Masi A, Viganotti M, Antoccia A., Magrelli A., Salvatore M., Azzalin G., Tosto F., Lorenzetti S., Maranghi F., Mantovani A., Macino G., Tanzarella C., Taruscio D. (2010). Characterization of HuH6, Hep3B, HepG2 and HLE liver cancer cell lines by WNT/ β -catenin pathway, microRNA expression and protein expression profile'. *Cellular & Molecular Biology* 10:1299-1317.
- 24) Frazzoli C, Mantovani A. (2010) Toxicants Exposures as Novel Zoonoses: Reflections on Sustainable Development, Food Safety and Veterinary Public Health. *Zoonoses Public Health.* 7-8: e136-e142
- 25) Frazzoli C, Orisakwe OE, Dragone R, Mantovani A. (2010) Diagnostic health risk assessment of electronic waste on the general population in developing countries' scenarios. *Environmental Impact Assessment.* 30, 388-99.
- 26) Latini G, Knipp G, Mantovani A, Marcovecchio ML, Chiarelli F, Söder O. (2010) Endocrine disruptors and human health. *Mini Rev Med Chem.* 10: 846-55.
- 27) Lorenzetti S, Marcoccia D, Narciso L, Mantovani A. (2010) Cell viability and PSA secretion assays in LNCaP cells: a tiered in vitro approach to screen chemicals with a prostate-mediated effect on male reproduction within the ReProTect project. *Reprod Toxicol.* 30(1):25-35.
- 28) Mantovani A, Frazzoli C, Cubadda F. (2010) Organic forms of trace elements as feed additives: Assessment of risks and benefits for farm animals and consumers. *Pure Appl Chem,* 82:393-407.
- 29) Mantovani A., Frazzoli C. (2010) Risk assessment of toxic contaminants in animal feed. *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources.* 5, 046: 1-14.
- 30) Maranghi F, Lorenzetti S, Tassinari R, Moracci G, Tassinari V, Marcoccia D, Di Virgilio A, Eusepi A, Romeo A, Magrelli A, Salvatore M, Tosto F, Viganotti M, Antoccia A, Di Masi A, Azzalin G, Tanzarella C, Macino G, Taruscio D, Mantovani A (2010). In utero exposure to di-(2-ethylhexyl) phthalate affects liver morphology and metabolism in post-natal CD-1 mice. *Reprod Toxicol.* 29: 427-32.
- 31) Turci R, Balducci C, Brambilla G, Colosio C, Imbriani M, Mantovani A, Vellere F, Minoia C. (2010) A simple and fast method for the determination of selected organohalogenated compounds in serum samples from the general population. *Toxicol Lett.* 192(1):66-71.
- 32) Viganotti M, Antoccia A., Magrelli A., Salvatore M., Azzalin G., Tosto F., Lorenzetti S., Maranghi F., Mantovani A., Macino G., Tanzarella C., Taruscio D., and Di Masi A. Characterization of HuH6, Hep3B, HepG2 and HLE liver cancer cell lines by WNT/ β -catenin pathway, microRNA expression and protein expression profile *Cell Mol Biol (Noisy-le-grand).* 2010 56 Suppl:OL1299-317.
- 33) Caserta D, Mantovani A, Marci R, Fazi A, Ciardo F, La Rocca C, Maranghi F, Moscarini M. (2011) Environment and women's reproductive health. *Hum Reprod Update.* 2011 31: 792-6.
- 34) Caserta D, Mantovani A, Ciardo F, Fazi A, Baldi M, Sessa MT, la Rocca C, Ronchi A, Moscarini M, Minoia C. (2011) Heavy metals in human amniotic fluid: a pilot study. *Prenat Diagn.* 2011 31:792-6.
- 35) Tait S, La Rocca C, Mantovani A. Exposure of human fetal penile cells to different PCB mixtures: transcriptome analysis points to diverse modes of interference on external genitalia programming. *Reprod Toxicol.* 2011 32: 1-14.
- 36) Taruscio D, Carbone P, Grannata O, Baldi F, Mantovani A. Folic acid and primary prevention of birth defects. *Biofactors* 2011, 37: 280-4.
- 37) Lorenzetti S, Altieri I, Arabi S, Balduzzi D, Bechi N, Cordelli E, Galli C, Ietta F, Modena SC, Narciso L, Pacchierotti F, Villani P, Galli A, Lazzari G, Luciano AM, Paulesu L, Spanò M, Mantovani A. Innovative non-animal testing strategies for reproductive toxicology: the contribution of Italian partners within the EU project ReProTect. *Ann Ist Super Sanità* 2011; 47(4):429-443.
- 38) Cubadda F, Aureli F, D'Amato M, Raggi A, Turco AC, Mantovani A. Speciated urinary arsenic as biomarker of dietary exposure to inorganic arsenic in residents living in high-arsenic areas in Latium, Italy. *Pure and Applied Chemistry* 2012, 84:203-14
- 39) La Rocca C, Alessi E, Bergamasco B, Caserta D, Ciardo F, Fanello E, Focardi S, Guerranti C, Stecca L, Moscarini M, Perra G, Tait S, Zoghi C, Mantovani A. Exposure and effective dose biomarkers for perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) in infertile subjects: Preliminary results of the PREVIENI project. *Int J Hyg Environ Health.* 2012 Feb;215(2):206-11.

- 40) Maranghi F, Mantovani A. Targeted toxicological testing to investigate the role of endocrine disruptors in puberty disorders. *Reproductive Toxicology* 2012, 33(3):290-6.
- 41) Latini G, Dipaola L, Mantovani A, Picano E. Reproductive Effects of Low-to-Moderate Medical Radiation Exposure. *Curr Med Chem.* 2012 19(36):6171-7.
- 42) Proietti I., Mantovani A., Mouquet-Rivier C., Guyot J.-P. Modulation of chelating factors, trace minerals and their estimated bioavailability in Italian and African sorghum (*Sorghum bicolor* (L.) Moench) porridges. *International Journal of Food Science and Technology* (2013) 48: 126-32
- 43) Caserta D, Bordi G, Ciardo F, Marci R, La Rocca C, Tait S, Bergamasco B, Stecca L, Mantovani A, Guerranti C, Fanello EL, Perra G, Borghini F, Focardi SE, Moscarini M. The influence of endocrine disruptors in a selected population of infertile women. *Gynecol Endocrinol.* 2013 29: 444-7.
- 44) Maranghi F, Tassinari R, Moracci G, Altieri I, Rasinger JD, Carroll TS, Hogstrand C, Lundebye AK, Mantovani A. Dietary exposure of juvenile female mice to polyhalogenated seafood contaminants (HBCD, BDE-47, PCB-153, TCDD): comparative assessment of effects in potential target tissues. *Food Chem Toxicol.* 2013, 56: 443-9.
- 45) Caserta D, Bordi G, Guerranti C, Fanello EL, Perra G, Borghini F, La Rocca C, Tait S, Bergamasco B, Stecca L, Marci R, Lo Monte G, Soave I, Mantovani A, Focardi SE, Moscarini M. (2013) Correlation of endocrine disrupting chemicals serum levels and white blood cells gene expression of nuclear receptors in a population of infertile women. *International Journal of Endocrinology*, 2013: doi: 10.1155/2013/510703. Epub 2013 Apr 21.
- 46) Maranghi F, Tassinari R, Mantovani A. Toxicological assessment of drugs that effect the endocrine system in puberty-related disorders. *Expert Opinion on Drug Metabolism and Toxicology* 2013 9:1309-16
- 47) Maranghi F, De Angelis S, Tassinari R, Chiarotti F, Lorenzetti S, Moracci G, Marcoccia D, Gilardi E, Di Virgilio A, Eusepi A, Mantovani A, Olivieri A. Reproductive toxicity and thyroid effects in Sprague Dawley rats exposed to low doses of ethylenethiourea *Food and Chemical Toxicology.* 2013 59:261-71.
- 48) Proietti I, Tait S, Aureli F, Mantovani A (2013). Modulation of sorghum biological activities by varieties and two traditional processing methods: an integrated in vitro/modelling approach. *International Journal of Food Science and Technology* 2013; 49:1593-949)
- Proietti I, Frazzoli C, Mantovani A. Identification and management of toxicological hazards of street foods in developing countries. (2014) *Food and Chemical Toxicology*, 63:143-52.
- 50) Tassinari R, Cubadda F, Moracci G, Aureli F, D'Amato M, Valeri M, De Berardis, Raggi A, Mantovani A, Passeri D, Rossi M, Maranghi F. Oral, short-term exposure to titanium dioxide nanoparticles in Sprague-Dawley rat: focus on reproductive and endocrine systems and spleen. *Nanotoxicology* 2014; 8:654-62.
- 51) Pouokam GB, Ajaezi GC, Mantovani A, Orisakwe OE, Frazzoli C. Use of Bisphenol A-containing baby bottles in Cameroon and Nigeria and possible risk management and mitigation measures: community as milestone for prevention (2014). *Science of the Total Environment* 15: 296-302
- 52) Taruscio D., Arriola L., Baldi F., Barisic I., Bermejo-Sánchez E., Bianchi F., Calzolari E., Carbone P., Curran R., Game E., Gatt M., Irgens L., Latos-Bieleńska A., Khoshnood B., Mantovani A., Martínez-Frías M.L., Neville A., Reißmann A., Ruggeri S., Wellesley D., Dolk H. European recommendations for primary prevention of congenital anomalies: a joined effort of EUROCAT and EUROPLAN projects to facilitate inclusion of this topic in the National Rare Disease Plans. (2014) *Public Health Genomics* 2014;17:115-23.
- 53) Fucic A., Mantovani A. Puberty dysregulation and increased risk of disease in adult life: possible modes of action. *Reproductive Toxicology* 2014; 44C:15-22.
- 54) Frazzoli C, Mantovani A, Dragone R. Local role of food producers' communities for a Global One-Health framework: the experience of traslational research in an Italian dairy chain. *Journal of Agricultural Chemistry and Environment* 2014; 3: 14-20
- 55) Caserta D, Di Segni N, Mallozzi M, Giovanale V, Mantovani A, Marci R, Moscarini M. Bisphenol A and the female reproductive tract: an overview of recent laboratory evidence and epidemiological studies. *Reproductive Biology and Endocrinology* ((2014) May 9;12:37. doi: 10.1186/1477-7827-12-37.
- 56) Smeriglio A, Trombetta D, Marcoccia D, Mantovani A, Lorenzetti S. Intracellular distribution and biological effects of plant bioactives in a sex steroid-sensitive model of human prostate adenocarcinoma. *Anticancer Agents in Medicinal Chemistry* 2014 14:1386-96
- 57) La Rocca C, Tait S, Guerranti C, Busani L, Ciardo F, Bergamasco B, Stecca L, Perra G, Mancini FR, Marci R, Bordi G, Caserta D, Focardi S, Moscarini M, Mantovani A. Exposure to endocrine disruptors and nuclear receptors gene expression in infertile and fertile women from different Italian

- areas. *International Journal of Environmental Research and Public Health* 2014 11, 10146-10164
- 58) La Rocca C, Tait S, Mantovani A. Use of a combined in vitro assay for effect-directed assessment of infant formulas. *International Journal of Food Science and Technology* 2014 doi:10.1111/ijfs.12709.
- 59) Rachid M, Mokhtar IY, Maranghi F, Mantovani A. Protective role of *Nigella sativa* oil against reproductive toxicity, hormonal alterations and oxidative damage induced by chlorpyrifos in male rats. *Toxicology and Industrial Health* 2014 (in press)
- 60) Appicciafuoco B, Dragone R; Frazzoli C, Bolzoni G, Mantovani A; Ferrini AM. Microbial screening for quinolones residues in cow milk by bio-optical method. *Journal of Pharmaceutical and Biomedical Analysis* 2014 (in press)

Other International publications

- 1) Mantovani A., Cozzani R. (2006) Risk assessment of feed additives and contaminants. In "Towards a risk-based chain control. Vol.4- Food Safety assurance and veterinary public health" (ed. Frank J. Smulders), Wageningen Academic Publishers, the Netherlands, pp. 45-56.
- 2) Mantovani A., Maranghi F. (2007) Endpoints for prenatal exposures in toxicological studies. In: *Congenital Diseases and the Environment* (Series: Environmental Science and Technology Library, Vol. 23, Nicolopoulou-Stamati, P.; Hens, L.; Howard, C.V. Eds.), Springer, Dordrecht (NL), pp. 21-36.
- 3) Rescia M., Mantovani A. (2007). Pesticides as endocrine disruptors: identification of hazards for female reproductive function. In *Reproductive Health and the Environment. Series: Environmental Science and Technology Library, Vol. 22. Nicolopoulou-Stamati, P.; Hens, L.; Howard, C.V. (Eds.)*. Springer, Dordrecht (NL), pp. 227-48
- 4) National Committee on Biosafety, Biotechnologies and Life Sciences (2010). Proposal for a Platform: Environment and Health. Priorities and objectives for the evaluation and management of the risk to human health and quality of the environment from exposure to endocrine disruptors. (Member of the Working Group) http://www.iss.it/binary/inte/cont/IE_Environment_and_Health.pdf
- 5) Independent Scientific Peer Review Panel Report. Evaluation of the LUMI-CELL® ER (BG1Luc ER TA) Test Method (member of Working Group organized by Interagency Coordinating Committee on the Validation of Alternative Methods –ICCVAM; National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods –NICEATM; National Institute of Environmental Health Sciences -NIEHS). May 2011 http://iccvam.niehs.nih.gov/docs/endo_docs/EDPRPRept2011.pdf
- 6) Mantovani A, Proietti I. Occurrence of endocrine disrupters in food chains. In: *Hormone-Disruptive Chemical Contaminants in Food* (ed by Ingemar Pongratz and Linda Bergander). *Issues in Toxicology*, n. 9. RSC Press, 2011, 199-215.
- 7) Frazzoli C., Mantovani A., Orisakwe O.E. (2011) Electronic Waste and Human Health. In Jerome Nriagu (Editor-in-Chief), *Encyclopedia of Environmental Health*. <http://media.matthewsbooks.com.s3.amazonaws.com/documents/tocwork/044/9780444522733.pdf>
- 8) Mantovani A. Endocrine disruptors and puberty disorders from mice to men (and women). In: *Endocrine Disruptors and Puberty* (ed. by Evanthia Diamanti-Kandarakis and Andrea C. Gore). *Contemporary Endocrinology Part 1*, Springer, 2012, 119-137,
- 9) Mantovani A. Chemical risk assessment of animal feed. In: *Animal feed contamination: Effects on livestock and food safety* (ed. by Johanna Fink-Gremmels). *Woodhead Publishing Series in Food Science, Technology and Nutrition No. 215*. 2012 <http://www.woodheadpublishing.com/en/book.aspx?bookID=1921>
- 10) C. Frazzoli, S. Lorenzetti, A. Mantovani "Sustainable food safety and trans-generational health outcomes in developing economies" (pp. 27-33); A. Mantovani "Feed for food: feed components at the food security-food safety interface" (pp. 52-9); G.B. Pouokam, G. Chukwuebuka Ajaezi, C. Frazzoli, O.E. Orisakwe, A. Mantovani "Dumping of banned baby bottles from advanced economies: an overlooked hazard for African infants?" (pp. 180-8). In: Frazzoli C, Asongalem EA, Orisakwe OE (Ed.). "Cameroon-Nigeria-Italy scientific cooperation: veterinary public health and sustainable food safety to promote "one health/one prevention". 2012. *Rapporti ISTISAN 12/49*, http://www.iss.it/binary/publ/cont/12_49_web.pdf
- 11) EUROCAT - EUROPLAN. Recommendations on policies to be considered for the primary prevention of congenital anomalies in National Plans and Strategies on Rare Diseases (adopted by EUCERD in 2013) (Member of Working Group) http://www.eucerd.eu/wp-content/uploads/2013/03/Eurocat_Reco_PrimaryPrevention.pdf
- 12) Mantovani A. Emerging Contaminants. *The Analytical Scientist*, February 2013 http://issuu.com/theanalyticalscientist/docs/0213_tas_issue_2_-_web
- 13) Proietti I, Vu Hoang D, Mantovani A, Frazzoli C. Protecting Vietnamese street food. *The New*

Agriculturalist May 2013 <http://www.newag.info/en/research/innovationItem.php?a=2984>

14) Frazzoli C., Mantovani A. and Orisakwe O.E, Electronic Waste and Human Health, Reference Module in Earth Systems and Environmental Sciences, Elsevier, 2013
<http://www.sciencedirect.com/science/referenceworks/9780124095489>

15) Lorenzetti S., Mantovani A. Reproductive and Developmental Toxicity Testing: issues for 3Rs implementation. Chapter 17 in : Reducing, Refining and Replacing the Use of Animals in Toxicity Testing (Ed.by Dave Allen and Mike D Waters) Series: Issues in Toxicology ISSN: 1757-7179, Royal Society of Chemistry, London, UK (2014) pp. 330-347

Projects

I am currently co-ordinator of

- the EU LIFE project LIFE-EDESIA (<http://www.iss.it/life>) on the development of an in silico/in vitro strategy for selecting safer alternatives to endocrine disrupting substances currently used in consumer products;

- the national project ALERT to implement the use of the ISS patent BEST - see below- for the early prevention and management of contaminants in the dairy chain <http://www.alert2015>

Patents

Co-author (with C. Frazzoli -ISS-, R.Dragone -National Research Council- and L.Campanella - "La Sapienza" University) of the European ISS PCT patent (Bio)Sensors' system in Food Safety [BEST] (Italian patent 2008-European patent 2010)

Memberships

Member of the European Teratology Society (ETS)

Since January 2015 up December 2016, vice-president of the ETS

Other Relevant Information

- invited speaker to the European Parliament workshop "Endocrine disruptors and impact on health" (Bruxelles, 18/9/2012) with the contribution "Endocrine disruptors: the standpoint of a Public Health Institute"

- expert in toxicology contributing to the European Recommendations on Primary Prevention of Congenital Anomalies, http://www.eucerd.eu/wp-content/uploads/2013/03/Eurocat_Reco_PrimaryPrevention.pdf EFSA Opinions and documents to which I gave direct contribution as chair/rapporteur/member of the working groups preparing the draft opinions

PPR Panel (Plant Protection Products and their Residues, 2012-15;
<http://www.efsa.europa.eu/en/pesticides/pesticidesdocs.htm>).

Below the opinions to which I provided a direct contribution as member of the PPR Working Groups:

- Identification of pesticides to be included in cumulative assessment groups on the basis of their toxicological profile (2013)

- Relevance of dissimilar mode of action and its appropriate application for cumulative risk assessment of pesticides residues (2013)

- Developmental neurotoxicity potential of acetamiprid and imidacloprid (2013)

- Good modelling practice in the context of mechanistic effect models for risk assessment of plant protection products (2014)

As member (representative of PPR) of Standing Working Group on Emerging Risks

- Technical Report "A systematic procedure for the identification of emerging chemical risks in the food and feed chain" (EFSA supporting publication 2014:EN-547)

FEEDAP Panel (Additives and Products or Substances used in Animal Feed;
<http://www.efsa.europa.eu/en/panels/feedap.htm>): member (2003-12) and external expert of the Working Groups on Trace Elements and Vitamins in Feedingstuffs (since 2012):.

Below is a selection of main opinions to which I provided a direct contribution as member of the FEEDAP Working Groups:

PPR Panel (Plant Protection Products and their Residues, 2012-15;
<http://www.efsa.europa.eu/en/pesticides/pesticidesdocs.htm>).

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As member (representative of PPR) of the Standing Working Group on Emerging Risks

- Technical Report "A systematic procedure for the identification of emerging chemical risks in the food and feed chain" (EFSA supporting publication 2014:EN-547)

FEEDAP Panel (Additives and Products or Substances used in Animal Feed; <http://www.efsa.europa.eu/en/panels/feedap.htm>): member (2003-12) and external expert of the Working Groups on Trace Elements and Vitamins in Feedingstuffs (since 2012):.

Below is a selection of main opinions to which I provided a direct contribution as rapporteur and/or chair and/or member of the FEEDAP Working Groups:

Trace elements in feeds

Cobalt compounds as additives in animal nutrition (2009);

Cobalt carbonate as feed additive for ruminants, horses and rabbits (2012)

Copper: inorganic compounds (2011)

Copper, organic compounds (2008, 2009, 2013)

Chromium (including chromium methione) as feed additive for all species (2009)

Iodine in feedingstuffs (2005)

Iodine compounds as feed additives for all animal species:(2013)

Iron organic compounds (2013)

Manganese inorganic compounds (2013),

Manganese, organic compounds (2008, 2009, 2010, 2013)

Selenium organic compounds (2007, 2009, 2011),

Zinc inorganic compounds (2012)

Zinc organic compounds (2008, 2009, 2012)

Vitamins and pro-vitamins in feeds

Beta-carotene (2012)

Vitamin A (stabilised retinyl esters) (2013)

Vitamin D3 (cholecalciferol) (2013)

Vitamin E (2010)

Vitamin K3 (2014)

Betaine (2013)

Biotin (2012)

Folic acid (2012)

Inositol (2014)

Nicotinic acid and Nicotinamide (2012)

Pantothenic acid and related compounds (2011)

Taurine (2012)

Vitamin B1 (2011)

Vitamin B2 (2014)

Vitamin B6 (2010)

Vitamin C (2013)

Other feed additives and ingredients

Benzoic Acid in different pig categories (2005, 2007, 2012)

Preparation of benzoic acid and essential oil compounds as feed additive for chickens for fattening (2012).

Hemp (*Cannabis* genus) for use as animal feed (2011).

Chesson A, Gropp J, Mantovani A, Roncancio C; Special issue: Ten years of EFSA's FEEDAP Panel and its main achievements. *EFSA Journal* 2012;10(10):s1005. [9 pp.].

Further to my work within the FEEDAP and PPR Panel, I collaborated to prepare other EFSA opinions and documents by the Scientific Committee as well as other EFSA's Panels and units.

- Scientific Committee

Existing approaches incorporating replacement, reduction and refinement of animal testing (2009)

Exploring options for providing advice about possible human health risks based on the concept of Threshold of Toxicological Concern (TTC) (2012)

- Emerging Risks (EMRISK) Unit

Data collection for the identification of emerging risks related to food and feed (2011)

- Panel on Contaminants in the Food Chain (CONTAM)

Health risks to consumers associated with exposure to organotins in foodstuffs (2004)

- Panel on Food Contact Materials, Enzymes, Flavourings and Processing Aids (CEF)

Bisphenol A: evaluation of a study investigating its neurodevelopmental toxicity, review of recent scientific literature on its toxicity and advice on the Danish risk assessment of Bisphenol A (2010)

- Panel on Food Additives and Nutrient Sources added to Food (ANS)

Invited speaker ("Contribution to the public consultation") at the Follow-up meeting on the web-based Public Consultation on Aspartame (Brussels 9/4/2013)

- Panel on Genetically Modified Organisms (GMO)

Review of the Séralini et al. (2012) publication on a 2-year rodent feeding study with glyphosate formulations and GM maize NK603 as published online on 19 September 2012 in *Food and Chemical Toxicology* (Statement of EFSA, 2012: peer reviewer of statement)