

Sabrina Tait

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Date of birth: 09/12/1971 **Nationality:** Italian

EDUCATION AND TRAINING

[10/1991 – 07/2000] **Master science in Chemistry**

University of Rome "Sapienza"

Final grade: 110/110 **Level in EQF:** EQF level 7

Thesis: Poliovirus morphogenesis: in vitro interaction studies between capsid precursors and genomic RNA

[08/2004 – 10/2005] **Second level Master in Bioinformatics**

University of Rome "Sapienza"

Final grade: 110/110 cum laude **Level in EQF:** EQF level 8

WORK EXPERIENCE

[12/2016 – Current] **Researcher**

Istituto Superiore di Sanità - Center for Gender-Specific Medicine

City: Rome

Country: Italy

Main activities and responsibilities:

Toxicological assessment of food and environmental contaminants by in vitro, ex vivo and human studies as well as omics approaches for the identification of modes of action and biomarkers of effect, with a special focus on sex-specific effects

[09/2005 – 12/2016] **Researcher**

Istituto Superiore di Sanità - Dept. Food Safety and Veterinary Public Health

City: Rome

Country: Italy

Main activities and responsibilities:

Toxicological assessment of food and environmental contaminants by in vitro, ex vivo and human studies as well as omics approaches for the identification of modes of action and biomarkers of effect

[09/2000 – 09/2005] **Researcher**

Istituto Superiore di Sanità - Dept. of Infectious, Parasitic and Immunomediated Diseases

City: Rome

Country: Italy

Main activities and responsibilities:

Research studies on antiviral activity of natural and synthetic compounds against Picornaviruses infection

[10/1997 – 05/2000] **Thesis fellow**

Istituto Superiore di Sanità - Lab. of Cellular Biology

City: Rome

Country: Italy

Main activities and responsibilities:

Internship for the Master Thesis's project

SCIENTIFIC ACTIVITY

Publication IDs

ORCID ID: 0000-0001-8029-8625

Scopus ID: 36762945200

Researcher ID: C-6071-2015

H index: 15 (Scopus); 16 (Google Scholar)

Reviewer activity

publons.com/a/1281503/

Relevant publications

- **Tait S**, Ricceri L, Venerosi A, Maranghi F, Calamandrei G, Mantovani A. "**Long-Term Effects On Hypothalamic Neuropeptides Following Developmental Exposure To Chlorpyrifos In Mice**". Environ. Health Perspect. (2009); 117 (1): 112-116. doi: 10.1289/ehp.11696
- **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); vol.32(1): 1-14. doi: 10.1016/j.reprotox.2011.02.001
- La Rocca C, Alessi E, Bergamasco B, Caserta D, Ciardo F, Fanello E, Focardi S, Guerranti C, Moscarini M, Perra G, **Tait S**, Zaghi C, Mantovani A. "**Exposure and effective dose biomarkers for PFOA/PFOA in infertile subjects: preliminary results of the PREVIENI project**". Int. J. Hyg. Environ. Health (2012); 215(2): 206-211. doi: 10.1016/j.ijheh.2011.10.016
- 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 Receptor Gene Expression in Infertile and Fertile Women from Different Italian Areas**". Int. J. Environ. Res. Public Health. (2014); 11: 10146-10164. doi: 10.3390/ijerph111010146
- Venerosi A, **Tait S**, Stecca L, Chiarotti F, De Felice A, Cometa MF, Volpe MT, Calamandrei G, Ricceri L. "**Effects of maternal chlorpyrifos diet on social investigation and brain neuroendocrine markers in the offspring - a mouse study**". Environ. Health (2015); 14(1): 32. doi: 10.1186/s12940-015-0019-6
- La Rocca C, **Tait S**, Guerranti C, Busani L, Ciardo F, Bergamasco B, Perra G, Mancini FR, Marci R, Bordi G, Caserta D, Focardi S, Moscarini M and Mantovani A. "**Exposure to Endocrine Disruptors and Nuclear Receptors Gene Expression in Infertile and Fertile Men from Italian Areas with Different Environmental Features**". Int. J. Environ. Res. Public Health. (2015); 12(10): 12426-12445. doi: 10.3390/ijerph121012426
- **Tait S**, Tassinari R, Maranghi F, Mantovani A. "**Bisphenol A affects placental layers morphology and angiogenesis during early pregnancy phase in mice**". J Appl. Toxicol. (2015); 35(11):1278-1291. doi: 10.1002/jat.3176

- Stecca L, Tait S, Corrado F, Esposito M, Mantovani A, La Rocca C. “***Development of an in vitro test battery model based on liver and colon cancer cell lines to discriminate PCB mixtures by transcription factors gene expression analysis***”. *Toxicol. In Vitro* (2016); 34:204-211. doi: 10.1016/j.tiv.2016.04.009
- Tait S, Perugini M, La Rocca C. “***Relative toxicological ranking of eight polybrominated diphenyl ether congeners using cytotoxicity, chemical properties and exposure data***”. *Food Chem. Toxicol.* (2017), 108: 74-84. doi: 10.1016/j.fct.2017.07.041
- Narciso L, Ietta F, Romagnoli R, Paulesu L, Mantovani A, Tait S. “***Effects of Bisphenol A on endogenous retroviral envelopes expression and trophoblast fusion in BeWo cells***”. *Reprod. Toxicol.* (2019); 89: 35–44. doi: 10.1016/j.reprotox.2019.07.001

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- Zezza D, Tait S, Della Salda L, Amorena M, Merola C, Perugini M. “***Toxicological, gene expression and histopathological evaluations of environmentally realistic concentrations of polybrominated diphenyl ethers PBDE-47, PBDE-99 and PBDE-209 on zebrafish embryos***”. *Ecotoxicol. Environ. Safety* (2019); 183: 109566. doi: 10.1016/j.ecoenv.2019.109566
- Tassinari R, Narciso L, Tait S, Busani L, Martinelli A, Di Virgilio A, Carli F, Deodati A, La Rocca C, Maranghi F and the LIFE PERSUADED Project Group “***Juvenile toxicity rodent model to study toxicological effects of bisphenol A (BPA) at dose levels derived from Italian children biomonitoring study***”. *Toxicol. Sci.* (2020); 173(2): 387-401. doi: 10.1093/toxsci/kfz226
- Tassinari R, Di Felice G, Butteroni C, Barletta B, Corinti S, Cubadda F, Aureli F, Raggi A, Narciso L, Tait S, Valeri M, Martinelli A, Di Virgilio A, Pacchierotti F, Cordelli E, Eleuteri P, Villani P, Fessard V, Maranghi F. “***Hazard identification of pyrogenic synthetic amorphous silica (NM-203) after sub-chronic oral exposure in rat: A multitarget approach***”. *Food. and Chem. Toxicol.* (2020); 137: 111168. doi: 10.1016/j.fct.2020.111168
- Tait S, Carli F, Busani L, Buzzigoli E, Della Latta V, Deodati A, Fabbrizi E, Gaggini M, Maranghi F, Tassinari R, Toffol G, Cianfarani S, Gastaldelli A, La Rocca C and the LIFE PERSUADED Project Group “***Biomonitoring of Bis(2-ethylhexyl)phthalate (DEHP) in Italian children and adolescents: Data from LIFE PERSUADED project***”. *En v. Res.* (2020); 185: 109428. doi: 10.1016/j.envres.2020.109428
- Tait S, Baldassarre A, Masotti A, Calura E, Martini P, Vari R, Scazzocchio B, Gessani S, Del Cornò M. “***Integrated Transcriptome Analysis of Human Visceral Adipocytes Unravels Dysregulated microRNA-Long Non-coding RNA-mRNA Networks in Obesity and Colorectal Cancer***”. *Front. Oncol.* (2020); 10: 1089. doi: 10.3389/fonc.2020.01089
- Tassinari R, Tait S, Busani L, Martinelli A, Narciso L, Valeri M, Gastaldelli A, Deodati A, La Rocca C, Maranghi F and the LIFE PERSUADED Project Group “***Metabolic, reproductive and thyroid effects of bis(2-ethylhexyl) phthalate (DEHP) orally administered to male and female juvenile rats at dose levels derived from children biomonitoring study***”. *Toxicology* (2021); 449: 152653. doi: 10.1016/j.tox.2020.152653. PMID: 33309551
- Tassinari R, Tait S, Busani L, Martinelli A, Valeri M, Gastaldelli A, Deodati A, La Rocca C, Maranghi F and the LIFE PERSUADED Project Group “***Toxicological Assessment of Oral Co-Exposure to Bisphenol A (BPA) and Bis(2-ethylhexyl) Phthalate (DEHP) in Juvenile Rats at Environmentally Relevant Dose Levels: Evaluation of the Synergic, Additive or Antagonistic Effects***”. *IJERPH* (2021); 18:4584. doi: 10.3390/ijerph18094584

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- Tassinari R, Cordelli E, Eleuteri P, Villani P, Pacchierotti F, Narciso L, Tait S, Valeri M, Martinelli A, Di Felice G, Butteroni C, Barletta B, Corinti S, Lori G, Maranghi F. “***Effects of sub-chronic oral exposure to pyrogenic synthetic amorphous silica (NM-203)***”

- in male and female Sprague-Dawley rats: focus on reproductive systems". Reprod. Toxicol. (2021); 105:17-24. doi: 10.1016/j.reprotox.2021.08.001*
- Lori G, Tassinari R, Narciso L, Udroiu I, Sgura A, Maranghi F, **Tait S.** "Toxicological Comparison of Mancozeb and Zoxamide Fungicides at Environmentally Relevant Concentrations by an In Vitro Approach". *IJERPH* (2021); 18(16):8591. doi: 10.3390/ijerph18168591
 - **Tait S.**, Carli F, Busani L, Ciociaro D, Della Latta V, Deodati A, Fabbrizi E, Pala AP, Maranghi F, Tassinari R, Toffol G, Cianfarani S, Gastaldelli A, La Rocca C. "Italian children exposure to Bisphenol A: biomonitoring data from LIFE PERSUADED project". *IJERPH* (2021); 18(22):11846. doi: 10.3390/ijerph182211846
 - Pontecorvi G, Bellenghi M, Tait S, Tirelli V, Matarrese P, Mattia G, Carè A, Puglisi R. "Different Susceptibilities of Human Melanoma Cell Lines to G2/M Blockage and Cell Death Activation in Response to the Estrogen Receptor Beta agonist LY500307". *J Cancer* (2022); 13(5):1573-1587. doi: 10.7150/jca.65425
 - Coppola L, **Tait S.**, Fabbrizi E, Perugini M, La Rocca C. "Comparison of the toxicological effects of pesticides in non-tumorigenic MCF-12A and tumorigenic MCF-7 human breast cells". *IJERPH* (2022); 19(8):4453. doi: 10.3390/ijerph19084453
 - **Tait S.**, Lori G, Tassinari R, La Rocca C, Maranghi F. "In Vitro Assessment and Toxicological Prioritization of Pesticide Mixtures at Concentrations Derived from Real Exposure in Occupational Scenarios". *IJERPH* (2022); 19(9):5202. doi: 10.3390/ijerph19095202

EXPERT IN REGULATORY GROUPS

[03/2012 – Current]

Member of the Validation management group on non-animal testing (VMG-NA) at OECD

[12/2020 – Current] **Member of the AOP Community of Trainers (COT) at OECD**

[09/05/2022 – Current] **Member of the Omics sub-group within EAGMST at OECD**

PROJECTS

[2015 – Current]

Development of two Adverse Outcome Pathways included in the OECD Workplan (1.42)

<https://aopwiki.org/aops/151>

Head of Project

[10/2018 – 03/2023]

Integrated approach to evaluate children agricultural pesticide exposure and health outcome

Italian Ministry of Health funded Project RF-2016-02364628

Co-PI

[04/2016 – 04/2021]

Rep-Eat: Food quality and food innovative strategies to prevent reproductive and eating disorders

H2020 Marie Curie Cofund Doctoral Programme [grant agreement No 713714]

Supervisor ESR8 programme

[08/2014 – 10/2018]

Phthalates and bisphenol A biomonitoring in Italian mother-child pairs: link between exposure and juvenile diseases (LIFE-PERSUADED)

EC Directorate General Environment, LIFE+ Programme funded project (grant number LIFE13 ENV/IT/000482)

Member of the Project Management Staff

[03/2016 – 10/2017] **In vivo toxicity and genotoxicity of beauvericin and enniatins**

EFSA funded Grant GP/EFSA/BIOCONTAM/2015/02

[02/2013 – 02/2017] **NANoREG framework for the safety assessment of nanomaterials**

EU FP7 funded Project (grant 310584)

[11/2013 – 07/2016]

An integrated analytical, in vivo and in vitro approach to characterize polybrominated diphenyl ethers (PBDEs) in Italian mussels: a basis for a Toxic Equivalent factors (TEF) proposal

Italian Ministry of Health Funded Project [RF-2010-2311608]

Head of OU-ISS

[2008 – 2012]

Study in model areas on the environmental and health impact of some emerging chemical contaminants (endocrine disrupters): living environment, reproductive outcomes and repercussions in childhood (PREVIENI)

Italian Environment Ministry funded project (prot n.Q75)

[2007 – 2011]

The Bladder-Exstrophy Epispadias Complex and exogenous risk factors (BLADE)"

Istituto Superiore di Sanità- National Institute of Health Collaboration Project on Rare Diseases [grant 7IR1]

[2007 – 2010]

Innovative Approaches in the Evaluation and Prevention of Dietary Exposure to Persistent Toxic and Emerging Contaminants through the Study of Diet and the Development of Innovative Methods of Investigation

Italian Ministry of Health funded project RF-1144167

[2004 – 2008] **Network of Excellence CASCADE ACERT, WP19 Babyfood Project**

EU FP6 funded project FOOD-CT-2004-506319

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING B2 READING C2 WRITING C2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

DIGITAL SKILLS

My Digital Skills

Excellent user of MS Office (Word, Excel, Power Point, Access) | Proficient in R programming language | Advanced skills in statistical software (JMP, STATA, GraphPad) | Advanced skills in graphic design (Adobe Photoshop, Adobe Illustrator) | Advanced skills in Bioinformatic tools and databases