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Personal information

Name: Aldert H. Piersma
Titles: Prof. Dr. (Ph.D.)
Date of birth: April 9, 1957
Place of birth: Soest, The Netherlands
Citizenship: Dutch
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Education/career

1969-1975: Secondary education at the 'Chr. Lyceum', Alphen aan den Rijn, section Atheneum-B. Special topics: Dutch, English, Mathematics, Physics, Chemistry, Biology.

1975-1981: Academic education at the State University of Utrecht: biology with special reference to biochemistry (section B4). Specific scientific topics:

- experimental pharmacology (6 months): an electrophysiological study on the influence of peripheral analgetics on the longitudinal smooth muscle of the *Taenia coli* of the guinea pig, involving measurement of contraction and membrane potential using organ baths and the so-called 'sucrose-gap' technique.

- experimental tumour-immunology (9 months): investigation on the mechanism of an immunotherapy for tumour-bearing mice which was accomplished using immune lymphocytes and macrophages. Practical work included in vitro coculture of different cell populations, which were subsequently used in tumour-neutralization tests in vivo (see publication 4).

- experimental embryology (9 months): research focussed on the segregation of morphogenetic factors during early embryonic development of certain Molluscs, using immunological methods such as immuno-electrophoresis, immuno-precipitation, immuno-absorption, and SDS-polyacrylamide-gradient gelelectrophoresis of immune complexes.

1981-1985: Ph.D. studentship at the Department of Cell Biology and Genetics, Medical Faculty, Erasmus University, Rotterdam. An investigation on the role of fibroblastic reticular cells in the haemopoietic stroma in the regulation of proliferation and differentiation of haemopoietic stem cells in mice (see publications). These studies included a variety of in vivo animal experimentation and in vitro tissue culture techniques, as well as histological and biochemical methods. An important part of the research was devoted to the preparation of monoclonal antibodies versus fibroblastic cells in the haemopoietic stroma. The Ph.D. degree was obtained November 6, 1985.

1985-1987: Associate scientist at the Hubrecht Laboratory, Netherlands Institute for Developmental Biology, Utrecht. A study aimed at the development of a battery of in vitro methods for the identification of teratogenic agents and their mechanisms of action. Murine pluripotent embryonal carcinoma cell lines were employed, which resemble undifferentiated embryonic cells. Proliferation as well as differentiation of these cells into derivatives of each of the three germ layers was studied using

a wide range of tissue culture techniques. Monoclonal antibodies against differentiation-stage-specific antigens were used to monitor the differentiation processes. The effects of teratogenic agents in these systems were studied (see publications).

1988-2024: Senior Staff Scientist at the National Institute of Public Health and the Environment, Bilthoven, The Netherlands. Reproductive Toxicology Group leader of up to 10 collaborators which include scientists, technicians, and predoctoral students. Research is aimed at the study of the reproductive toxicity of xenobiotic compounds, mainly occupational toxicants and drugs. Investigation of pathogenesis and mechanisms of congenital malformations, with the aim to aid the risk assessment process. Development and validation of alternative methods to reduce animal experimentation in reproductive toxicology. The role of early nutrition in the predisposition to health effects later in life is a subject of increased interest since the late nineties and is gaining momentum. Application of toxicogenomics in reproductive toxicity assessment since 2004. Published an array of original research papers, reviews, abstracts, and RIVM-reports (see below).

2007-2024: Professor of Reproductive and Developmental Toxicology, seconded at the Utrecht University Faculty of Veterinary Medicine, Institute for Risk Assessment Sciences (IRAS), Department of Toxicology.

2016-2024: Professor of Substances and Prenatal Health Protection, sponsored by the Dutch Foundation "Proefdiervrij" (Den Haag), seconded at the Utrecht University Faculty of Veterinary Medicine, Institute for Risk Assessment Sciences (IRAS), Department of Toxicology.

2024-present: Retired from RIVM and Professor Emeritus at Utrecht University.

Advisory and educational tasks included: Specialist advisorship with respect to the interpretation of guideline-based reproductive toxicity test results for compound registration purposes. Lecturer in Developmental Biology and Toxicology Courses given at the Utrecht and Wageningen Universities. Lecturer in the Postacademic Course on Toxicology of the Open University. Served and serves on Committees and Working Groups of European Union, OECD, and WHO on e.g. Classification and Labelling, development of Test Guidelines and Technical Guidance Documents, the issue of Endocrine Disruption and the reproductive toxicity of antimalarial drugs. Referee for manuscripts submitted to a.o. Reproductive Toxicology, Toxicology in vitro, Toxicology, Food and Chemical Toxicology, Pediatric Research.

Research subjects included Nutrition in Pregnancy and the Prevention of Congenital Malformations and Adult Disease, Alternatives to Animal Experimentation in Developmental Toxicology, Developmental Immunotoxicology, Endocrine Disruption, Dose-Response Analysis Methodology in relation to Risk Assessment, and the Application of Genomics Technology in Reproductive Toxicology Testing.

International expert advisory tasks included the innovation and implementation of EU and OECD Classification & Labelling for Reproductive Toxicants, the role of validation in novel OECD test guidelines (OECD GD34), the innovation of testing strategies for the EU existing substances program (REACH), the definition of novel test guidelines for the neurobehavioural developmental study (OECD426) and for the uterotrophic assay, and the role of alternative testing strategies in the safety evaluation of chemicals (ReProTect, EU-REACH, OECD).

Highlights of specific activities are given below.

- Member of the European Teratology Society, 1989-present.
- Member of the Teratology Society (USA), 1989-present.
- Council Member of the European Teratology Society, 1996-1999.
- Chairman of the Netherlands Society of Toxicology Section on Reproductive Toxicology and Teratology, 1996-2002.
- Editorial Board member of Reproductive Toxicology, 1998-present.
- Member of Health Council of the Netherlands' Committee 543 for Classification and Labelling of Substances Toxic to Reproduction since its installation in 1996.

- Member of the Health Council of the Netherlands, 2001-2015.
- Member of the UK Food Standards Agency Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment, 2001-2004.
- Member of Health Council of the Netherlands' Committee 753 on the Risk to the Child of Alcohol Consumption during Pregnancy and Lactation, 2003-2005 (Report no GR 2004/22).
- Member of the Utrecht University DGK Animal Experiments Ethical Committee, specialty Alternative Methods, 2003-2009.
- Chairman, Scientific and Local Organizing Committee 33d Annual Conference of the European Teratology Society, Haarlem, The Netherlands, 3-7 September 2005.
- Course Coordinator, Postdoctoral Course in Reproductive Toxicology, Framework Postgraduate Education in Toxicology in The Netherlands, 2004-present.
- Member of the Health Council of the Netherlands' Committee 660 on Solvents and Fertility, 2005-2008.
- Guest Editor, *Reproductive Toxicology* 20(3), 2005. Special Issue: 33d Annual European Teratology Society Conference 2005.
- Council Member of the European Teratology Society, 2005-2010.
- Member of the Health Council of the Netherlands' Committee 459: Dutch Expert Committee on Occupational Safety (DECOS), 2007-present.
- European Associate Editor, *Reproductive Toxicology*, 2007-present.
- President-Elect, Vice-President, President, Past President of the European Teratology Society, 2008-2011
- Chairman, Health Council of the Netherlands Committee 543 on Classification & Labelling of Substances Toxic to Reproduction, 2008 – present.
- Guest Editor, *Reproductive Toxicology* 26(1), 2008. Special Issue: 36d Annual European Teratology Society Conference 2008
- Chairman, OECD Expert Group meeting on the extended one-generation study, Paris, 21-23 October 2008.
- Member, EFSA Scientific Committee Working Group on Thresholds for Toxicological Concern, 2008 - present
- Member, ILSI HESI developmental and reproductive toxicology technical committee, 2008 – present
- Chairman, OECD Expert Group meeting on the extended one-generation study, Paris, 21-23 October 2009.
- "Top Reviewer in 2009": *Reproductive Toxicology*, Elsevier
- Guest Editor, *Reproductive Toxicology* 30(1), 2010. Special Issue: ReProTect Project.
- Member of the Health Council of the Netherlands' Committee 873: Prenatal exposures to chemicals and late effects, 2011-present.
- Chairman, Plenary Reporting and Discussion Session, ECETOC Workshop on risk assessment of endocrine disrupting chemicals, 9th-10th May 2011, Florence, Italy.
- Chairman, ASAT Workshop on Male Fertility, 15-17 June 2011, Lunteren, The Netherlands
- Co-organiser and Cochair, DART Testing Strategies for Human Pharmaceuticals: Animal Models vs In-Vitro Approaches, DIA Pharma Symposium, Leiden, NL, 10-11 October 2011.
- Member, EU-SCENIHR Working Group on bisphenol-A, 2011-2013.
- Member, EU-SCENIHR Working Group on diethylhexylphthalate, 2012-2013.
- Member, ECVAM External Scientific Advisory Committee, 2013-present.
- Member, FIFRA Scientific Advisory Panel, US EPA endocrine disrupter testing program, May 2013.
- Guest Editor, *Reproductive Toxicology* 55, 1-124, 2015. ChemScreen Special Issue.
- Lecturer in advanced postgraduate courses on toxicology in Utrecht, London, Milano, Berlin and Stockholm (1990-present).

Ph.D students (graduation date):

1. Jeroen van Meeuwen (16 September 2008): Relevance of estrogenic and aromatase inhibiting effects of mixtures of xenoestrogens for human exposure. Utrecht University, ISBN 978-90-393-4890-1.
2. Dorien van Dartel (14 October 2011): Detection of developmental toxicity using differentiating embryonic stem cells. A transcriptomic approach. Maastricht University, ISBN 978-94-6169-045-6. **Joep van den Berckenprijs for Best Thesis in 2011, Netherlands Society of Toxicology.**
3. Esther de Jong (11 September 2012): Enhancing the applicability and predictability of the embryonic stem cell test for developmental toxicity. Utrecht University, ISBN 978-90-393-5813-9.
4. Ilse Tonk (15 November 2012): Developmental Immunotoxicity Testing for Hazard Identification; test protocols, exposure windows, and parameter sensitivity. Maastricht University, ISBN/EAN 978-94-6203-155-5.
5. Peter Theunissen (1 March 2013): Neurodevelopmental toxicity detection by transcriptomics in an embryonic stem cell differentiation assay. Maastricht University, ISBN/EAN 978-94-6203-277-4. **Joep van den Berckenprijs for Best Thesis in 2013, Netherlands Society of Toxicology. Top 3 nomination for the 2013 STW Simon Stevin Young Investigator Award.**
6. Sanne Hermsen (27 February 2014): Implementation of transcriptomics for developmental toxicity assessment in the zebrafish embryo model. Utrecht University, ISBN 978-94-6259-064-9. **Joep van den Berckenprijs for Best Thesis in 2014, Netherlands Society of Toxicology.**
7. Sjors Schulpen (7 July 2015): The application of mouse and human embryonic stem cells with transcriptomics in alternative developmental toxicity tests. A bridge from model species to man. Utrecht University, ISBN 978-94-6203-861-5.
8. Maarke Roelofs (1 March 2016): Steroidogenesis in vitro: towards relevant models for endocrine disruptor screening. Utrecht University, ISBN/EAN: 978-90-393-6493-2.
9. Virissa Lenters (19 September 2017): Assessing our multi-pollutant burden: environmental chemical exposures and reproductive and child health. Utrecht University, ISBN: 978-90-393-6823-7.
10. Myrto Dimopoulou (5 March 2018): Alternative developmental toxicity models for assessing the in vivo embryotoxicity of azoles. Wageningen University, ISBN: 978-94-6343-731-8, DOI: <https://doi.org/10.18174/430573>.
11. Manon Beekhuijzen (5 July 2018): Developmental and reproductive toxicology (DART) testing: The next Generation. Utrecht University, ISBN 978-94-6233-974-3.
12. Victoria de Leeuw (11 May 2021): On the right brain cell track. Stem cell differentiation assays for animal-free developmental neurotoxicity assessment. Utrecht University, ISBN/EAN: 978-94-6332-757-2.
13. Sander Clahsen (16 November 2021): Knowledge, beliefs and regulatory preferences in environmental health controversies: the case of endocrine disrupting substances. Utrecht university, ISBN 978-90-393-7408-5.
14. Gina Mennen (30 August 2022): Exploring the biological domain of the cardiac embryonic stem cell test. In search for biomarkers of developmental toxicity for optimizing an animal-free alternative test system. ISBN 978-94-6458-406-6.
15. Stella Fragki (14 March 2023): Paving the way towards the next generation risk assessment: Quantitative in vitro to in vivo extrapolation for the prediction of human toxicity based on alternative testing. ISBN 978-94-6483-001-9.
16. Laura Samrani (17 November 2023): Identification of biomarkers of the retinoic acid signaling pathway in the zebrafish embryo model to predict human developmental toxicants. ISBN 978-94-6483-475-8.
17. Julia Meerman (2025)
18. Job Berkhout (2025)
19. Nathalie Dierichs (2025)

Research grants

1. NL-PAD 94-09

Validation of an in vitro test battery for teratogenicity of xenobiotics 1994-1997

This project was aimed at the validation of two in vitro tests for embryotoxicity of chemicals, using differentiating embryonal carcinoma cells in vitro. The heart cell lineage and the neuronal lineage were used.

Role: Project Leader

2. EU-ECVAM 12225-96-10-F1ED ISP D

Validation of in vitro alternatives for developmental toxicity testing 1997-2001

This study carried out standardization of three in vitro tests and interlaboratory validation with standard set of chemicals.

Role: Associate Project Leader for the Whole Embryo Culture section

3. NL-PAD 98-07 ZonMW 3170034

Validation of benchmark approach for dose-response analysis in reproductive toxicology 1999-2003

This study investigates the consequences of test protocol changes (e.g. number of dose groups, animal no per group) for the derivation of the benchmark dose and the statistical uncertainty therein.

Role: Project Leader

4. EU-FW5 IP QLRT-2001-00596

FIRE: Integrated risk assessment of brominated flame retardants 2002-2006

This study investigates missing data in environmental fate, exposure, environmental and human toxicity of BFRs culminating in an integrated risk assessment.

Role: Work Package Leader for Rat Toxicity Studies

5. EU-FW5 IP QLK1-2000-00266

PHYTOPREVENT: Role of dietary phytoestrogens in the prevention of breast and prostate cancer 2001-2004

This study investigates the effects of dietary exposure to phytoestrogens during different life stages on breast cancer development in transgenic mouse models

Role: Co-investigator, RIVM Project Leader

6. Netherlands Toxicogenomics Center NGI

2004-2010

Subcoordinator Task force Reprotoxicogenomics

7. NL-ZonMw 98-03-006

Development of in vitro strategies for reproductive toxicity on male germ cells 2004-2007

Role: Scientific Advisor

8. EU-FW6 NoE No 506360

NuGo: Nutrigenomics

2004-2009

Role: Co-investigator

9. EU-FW6 IP LSHB-CT-2004-503257

ReProTect: Development of a novel approach in hazard and risk assessment of reproductive toxicity by a combination and application of in vitro, tissue and sensor technologies

2004-2009

This study works towards a strategy of development and implementation of in vitro alternatives in regulatory reproductive toxicity testing.

Role: Investigator into the incorporation of metabolic systems in in vitro developmental toxicity alternative test methods.

10. EU-FW6 IP FOOD-CT-2005-007036

EARNEST: Early Nutrition programming – longterm follow up of efficacy and safety trials and integrated epidemiological, genetic, animal, consumer and economic research.
2004-2009

11. EU-FW6 STREP No Food-CT-2004-513953

F&F: Food and Fecundity: Pharmaceutical Products as High Risk effectors
2004-2007

This study investigates the impact of pharmaceutical residues in food on human fecundity.

Role: Work Package Leader for Risk Assessment

12. US-NIEHS PAR 03-121

Perinatal Breast Cancer Programming: Fat and Estrogens.
2005-2008

This study investigates the role of dietary fatty acid composition and xenoestrogen exposure in the onset of spontaneous mammary tumours in breast cancer prone transgenic mice.

Role: Co-investigator

13. Netherlands Toxicogenomics Centre STW No.MF6809

2006-2010

Development of high-throughput toxicogenomics-based in vitro screens for rapid prediction of toxicity class.

Role: Task Force Leader Reprotoxicogenomics

14. ZonMW Dierproeven begrensd II: No 114000087

2007-2011

Validation and implementation of the embryonic stem cell test as an animal-free alternative for developmental toxicity testing.

Role: coordinator

15. Netherlands Toxicogenomics Centre NGI No. 05060510

2008-2012

An applied systems toxicology approach to predicting chemical safety

Role: subcoordinator Reprotoxicogenomics

16. EU-FP7 CLEAR: Climate change, environmental contaminants and reproductive health

2009-2013. Project Reference: 226217

Role: work package leader

17. EU-FP7 ChemScreen: Chemical Substance in vitro / in silico screening system to predict human- and ecotoxicological effects. Project Reference: 244236

2010-2014

Role: work package leader

18. CEFIC-LRI AIMT-5 Award, 2016-2018. Developmental Ontology.

Role: Principal Investigator

19. Stichting Proefdiervrij. Substances and Prenatal Health Protection. 2016-2020.

Role: Principal Investigator

20. Cosmetics Europe. Liver Ontology project. 2018-2020.

Role: Coworker

21. CEFIC-LRI AIMT-5.2 Award, 2019-2020. Developmental Ontology.
Role: Principal Investigator

22. IMI-ConcePTION: 'Building an ecosystem for better monitoring and communicating safety of medicines use in pregnancy and breastfeeding: validated and regulatory endorsed workflows for fast, optimised evidence generation'. 2019-2022.
Role: Contractant

23. SPR-COMPAIR: Public Health Effects of Combined Exposures via the Inhalation Route: The Case of Intensive Livestock Farming. 2019-2022.
Role: Project Leader

24. CEFIC EMSG59 Award. 2019-2020. Mechanistic study of liver-mediated thyroid disruption and neurodevelopmental toxicity.
Role: Principal Investigator

25. EU Horizon: HBM4EU 2019-2023
Role:Contractant

26. EU-Horizon: ONTOX 2021-2025
Role:Contractant

27. Dutch Science Agenda: Virtual Human Platform VHP4Safety 2021-2025
Role:Contractant

Training and Refresher Courses

1. Pharmacokinetics and Metabolism. Teratology Society; Boston MA, USA, July 5-6, 1986.
2. Postnatal Manifestations of Developmental Toxicity. Teratology Society; Palm Beach FL, USA, June 10-11, 1988.
3. Genstat 5 Introductory Course. Statistics department, Rothamsted Experimental Station; Bilthoven, Netherlands, July 10-12 1989.
4. Developmental Pathology. World Congress in Pediatric Pathology; Rotterdam, Netherlands, September 18, 1989.
5. Molecular Biology in the Study of Abnormal Development. Teratology Society; Victoria BC, Canada, June 7, 1990.
6. Regression Analysis and Analysis of Variance. RIVM; Bilthoven, Netherlands, October-November, 1990.
7. Good Laboratory Practices. International Center for Health and Environmental Education; Bilthoven, Netherlands, February 18-20, 1991.
8. Basic Management RIVM. W.L.de Galan groep; Bilthoven, Netherlands, March 20-22, 1991.
9. Human Developmental Toxicants - The Experimental and Epidemiological Evidence. Teratology Society; Boca Raton FL, USA, June 22-23, 1991.
10. European Integration. Netherlands Institute of International Relations Clingendael; Bilthoven, Netherlands, November 1991.

11. Communicative Skill. Bureau Schouten en Nelissen; Zeist, The Netherlands, April/May 1992.
12. Embryology for Teratologists. Teratology Society; Tucson AZ, USA, June 26-27, 1993.
13. Risk Assessment in Developmental Toxicology. Teratology Society; Keystone CO, USA, June 22-23, 1996.
14. Principles of Teratology: Application of New Technologies towards Understanding Abnormal Development. Teratology Society; Montreal, Canada, June 23-24, 2001.
15. Signalling Pathways and Tissue Interactions in Organ-System Development. Teratology Society; Vancouver, Canada, June 26-27, 2004.

Publications

1. Brockbank KGM, Piersma AH, van Peer CMJ. The regional distribution of fibroblastic progenitors in murine femoral marrow revisited. *Biomedecine* 36: 369-371, 1982.
2. Piersma AH, Ploemacher RE, Brockbank KGM. Transplantation of bone marrow fibroblastoid stromal cells in mice via the intravenous route. *Brit.J.Haemat.* 54: 285-290, 1983.
3. Piersma AH, Ploemacher RE, Brockbank KGM. Radiation damage to femoral hemopoietic stroma measured by implant regeneration and quantitation of fibroblastic progenitors. *Exp.Hemat.* 11: 844-890, 1983.
4. van Loveren H, de Groot JW, Koten JW, Piersma AH, de Weger RA, den Otter W. A macrophage factor enhancing the systemic antitumour effect of T-lymphocytes. *Immunobiology* 166: 118-130, 1984.
5. Piersma AH, Brockbank KGM, Ploemacher RE. Regulation of in vitro myelopoiesis by a hemopoietic stromal cell line. *Exp.Hemat.* 12: 617-623, 1984.
6. Ploemacher RE, Piersma AH, Brockbank KGM. The nature and function of granulopoietic microenvironments. *Blood Cells* 10: 341-367, 1984.
7. Piersma AH, Brockbank KGM, Ploemacher RE, van Vliet PW, van Peer CMJ, Visser WJ. Characterization of fibroblastic stromal cells from murine bone marrow. *Exp.Hemat.* 13: 237-243, 1985.
8. Brockbank KGM, Piersma AH, Ploemacher RE, Voerman J. Stromal cells (CFU-F) in normal and genetically anemic mouse strains. *Acta Hemat.* 74: 75-80, 1985.
9. Piersma AH, Ploemacher RE, Brockbank KGM. Recovery of fibroblastoid cells in the hemopoietic stroma after total body irradiation and bone marrow transplantation. *Transplantation* 40: 198-201, 1985.
10. Piersma AH, Ploemacher RE, Brockbank KGM, Nikkels PGJ, Ottenheim CPE. Migration of fibroblastoid stromal cells in murine blood. *Cell Tissue Kinetics* 18: 589-595, 1985.
11. Piersma AH, Ploemacher RE, Brockbank KGM. Monoclonal antibodies directed against fibroblastic stromal cells in murine hemopoietic organs. In: *Exp. Hemat. Today*: 50-54, 1985.
12. Piersma AH. The nature and function of fibroblastic reticular cells in the hemopoietic stroma. Thesis, Erasmus University Rotterdam, 1985.

13. Brockbank KGM, de Jong JP, Piersma AH, Voerman JSA. Hemopoiesis on purified bone-marrow-derived reticular fibroblasts in vitro. *Exp. Hemat.* 14: 386-394, 1986.
14. De Jong JP, Nikkels PGJ, Piersma AH, Ploemacher RE. Erythropoiesis and macrophage subsets in medullary and extramedullary sites. In: *Molecular and cellular aspects of erythropoiesis and quantitation of erythropoietin. Proc. NATO Advanced Research Workshop, Bad Windsheim, FRG, August 31 - September 4, 1986.*
15. Piersma AH, Willemse A, van den Brink CE, de Laat SW, Mummery CL. Mesodermal differentiation of embryonal carcinoma cells in coculture with visceral endoderm cell lines. In: *Cell to Cell Signals in Mammalian Development, NATO ASI Series Vol. H 26: 247-260, 1988.*
16. Mulder EJH, Brader LJ, Verhoef A, Piersma AH, Visser GHA, Peters PWJ. Whole rat embryo culture in serum of insulin-dependent (type-1) diabetic women. *Toxicology In Vitro* 3: 221-226, 1989.
17. Peters PWJ, Piersma AH. In vitro embryotoxicity and teratogenicity studies. *Toxicology in vitro* 4: 570-576, 1990.
18. Piersma AH, Verhoef A, Peters PWJ. Effects of low sodium concentration on the development of postimplantation rat embryos in culture and on their sensitivity to anticonvulsants. *Toxicology in Vitro* 5:71-75, 1991.
19. Van den Eijnden-van Raaij AJM, van Achterberg TAE, van der Kruijssen CMM, Piersma AH, Huylebroeck D, de Laat SW, Mummery CL. Differentiation of aggregated murine P19 embryonal carcinoma cells is induced by a novel visceral endoderm-specific FGF-like factor and inhibited by activin A. *Mechanisms of Development* 33: 157-166, 1991.
20. Mummery CL, van Achterberg TAE, van den Eijnden-van Raaij AJM, van Haaster L, Willemse A, de Laat SW, Piersma AH. Visceral endoderm-like cell lines induce differentiation of murine P19 embryonal carcinoma cells. *Differentiation* 46:51-60, 1991.
21. Van Maele-Fabry G, Picard JJ, Attenon P, Berthet P, Delhaise F, Govers MJAP, Peters PWJ, Piersma AH, Schmid BP, Stadler J, Verhoef A, Verseil C. Interlaboratory evaluation of three culture media for postimplantation rodent embryos. *Reproductive Toxicology* 5:417-426, 1991.
22. Piersma AH, van Aerts LAGJM, Verhoef A, Garbis-Berkvens JM, Robinson JE, Copius Peereboom-Stegeman JHJ, Peters PWJ. Biotransformation of cyclophosphamide in post-implantation rat embryo culture using maternal hepatocytes in coculture. *Pharmacology and Toxicology* 69: 47-51, 1991.
23. Verhoef A, Piersma AH. Teratologie en reproductietoxicologie. *Biotechniek* 32:21-23, 1993.
24. Piersma AH, Roelen B, Roest P, Haakmat-Hoesenie AS, Van Achterberg TAE, Mummery CL. Cadmium-induced inhibition of proliferation and differentiation of embryonal carcinoma cells in culture and mechanistic aspects of protection by zinc. *Teratology* 48: 335-341, 1993.
25. Piersma AH, Haakmat AS, Hagenaars AM. In vitro assays for the developmental toxicity of xenobiotic compounds using differentiating embryonal carcinoma cells in culture. *Toxicology in vitro*, 7: 615-621, 1993.
26. Piersma AH. Whole embryo culture and toxicity testing. *Toxicology in vitro* 7: 763-768, 1993.
27. Verhoef A, Piersma AH. Nitrofen-geïnduceerde hernia diaphragmatica en longhypoplasie in de rat: een diersmodel. *Biotechniek* 32: 42-44, 1993.

28. Hessel EM, Verhoef A, Van Loveren H, Piersma AH. Minimal immunologic changes in structurally malformed rats after prenatal exposure to cyclophosphamide. *Toxicology* 92: 287-299, 1994.
29. Van der Zee DC, De Heer E, Piersma AH, Vermeij-Keers Chr. Ultrastructural alterations caused by immunological reactions after intracardiac injection of allogeneic antibodies against blood group antigens: An experimental study using the in vitro whole-rat embryo culture. *Teratology* 52: 57-70, 1995.
30. Piersma AH, Attenon P, Bechter R, Govers MJAP, Krafft N, Schmid BP, Stadler J, Verhoef A, Verseil C. Interlaboratory evaluation of embryotoxicity in the postimplantation rat embryo culture. *Reproductive Toxicology* 9: 275-280, 1995.
31. Piersma AH, Verhoef A, Dortant PM. Evaluation of the OECD 421 reproductive toxicity test protocol using butyl benzyl phthalate. *Toxicology* 99: 191-197, 1995.
32. Piersma AH, Verhoef A, Dortant PM. Evaluation of the OECD 421 reproductive toxicity test protocol using 1-(butylcarbamoyl)-2-benzimidazolecarbamate (Benomyl). *Teratogenesis, Carcinogenesis, and Mutagenesis* 15: 93-100, 1995.
33. Piersma AH, Bechter R, Krafft N, Schmid BP, Stadler J, Verhoef A, Verseil C, Zijlstra J. Interlaboratory evaluation of five pairs of (non-)teratogens in post-implantation rat embryo culture. *Alternatives To Laboratory Animals*, 24: 201-209, 1996.
34. Piersma AH, Bode W, Verhoef A, Olling M. Teratogenicity of a single oral dose of retinyl palmitate in the rat and the role of dietary vitamin A status. *Pharmacology and Toxicology* 79: 131-135, 1996.
35. Piersma AH. Hormoonontregelaars. *Chemische feitelijkheden* 146: 1-11, maart 1998.
36. Piersma AH, Verhoef A, Opperhuizen A, Klaassen R, van Eijkeren J, Olling M. Embryotoxicity of carbamazepine in rat postimplantation embryo culture after in vitro exposure via three different routes. *Reproductive Toxicology* 12(2): 161-168, 1998.
37. Scholz G, Pohl I, Seiler A, Bremer S, Brown NA, Piersma AH, Holzhütter HG Spielmann H. Results of the first phase of the ECVAM project "prevalidation and validation of three in vitro embryotoxicity tests". (in german) *ALTEX* 15, 3-8, 1998.
38. Piersma AH. Chemische stoffen, voortplanting en nageslacht. *Chemische feitelijkheden* 167: 1-15, augustus 1999.
39. Genschow E, Scholz G, Brown NA, Piersma AH, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Spielmann H. Development of prediction models for three in vitro embryotoxicity tests which are evaluated in an ECVAM validation study. (in german) *ALTEX* 16, 73-83, 1999.
40. Piersma AH, Verhoef A, Elvers LH, Wester PW. Toxicity of compounds with endocrine activity in the OECD 421 reproductive toxicity screening test. In: *Endocrine disrupting compounds: wildlife and human health risks*. Symposium Proc. Eds. Vethaak AD, Rijs GBJ, vanderBurg B, Brouwer A, pp 58-60, 2000.
41. Genschow E, Scholz G, Brown NA, Piersma AH, Brady M, Clemann N, Huuskonen H, Paillard F, Bremer S, Becker K, Spielmann H. Development of prediction models for three in vitro embryotoxicity tests in an ECVAM validation study. *In Vitro & Molecular Toxicol.* 13, 51-65, 2000.
42. Beekhuijzen MEW, Verhoef A, Klaassen R, Rempelberg CJM, Piersma AH. Comparison of in vitro and in vivo developmental toxicity and pharmacokinetics of phenytoin in the rat. *Pharmacol. and Toxicol.* 87: 96-102, 2000.

43. Piersma AH, Verhoef A, te Biesebeek JD, Pieters MN, Slob W. Developmental toxicity of butylbenzylphthalate in the rat using a multiple dose study design. *Reprod. Toxicol.* 14: 417-425, 2000.
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94. Mirjam Luijten*, Aart Verhoef, Anja Westerman, Aldert H. Piersma. Application of a metabolising system as an adjunct to the whole embryo culture protocol. European Teratology Society 34th Conference 3-6 September 2006, Padova, Italy. Reproductive Toxicology 22 (2006), 276 (abs).
95. Mirjam Luijten^{1*}, Aart Verhoef¹, Ferdi van der Horst¹, Jeroen L.A. Pennings¹, Jan A.M.A. Dormans¹, Rudolf B. Beems¹, Henk J. van Kranen¹, Nico J.D. Nagelkerke², José L. Peñalvo³, Herman Adlercreutz³, Aldert H. Piersma¹. Dietary fatty acids and phytoestrogens modulate spontaneous mammary tumor development in TG.NK (MMTV/C-neu) mice. European Teratology Society 34th Conference, 3-6 September 2006, Padova, Italy. **Prize winning presentation.** Reproductive Toxicology 22 (2006), 275 (abs).
96. Marc F.J. Renkens*, Mirjam Luijten, Anja Westerman, Aart Verhoef, Frederik-Jan van Schoten*, Aldert H. Piersma. Assessment of the sensitivity of differential gene expression profiles as endpoint for developmental toxicity in rat Postimplantation whole embryo culture.

- European Teratology Society 34th Conference 3-6 September 2006, Padova, Italy **Prize winning presentation**. Reproductive Toxicology 22 (2006), 282 (abs).
97. Bessems J., Slob W, Van Eijkeren J, Sips, Hakkert and A. Piersma Postimplantation Rat Whole-Embryo Culture assay: *In vitro* – *In Vivo* Extrapolation. InVitTox 2006, Ostende, Belgium.
98. Bessems, Jos; Slob, Wout; Piersma, Aldert; Hakkert, Betty; Sips, Adrienne Postimplantation rat whole embryo culture assay: *in vitro* – *in vivo* extrapolation. SOT Charlotte NC USA March 2007.
99. Piersma AH. Alternatieven in de reproductietoxicologie. Voordracht Publieksdag Dierenbescherming afdeling Utrecht i.s.m Nederlands Centrum voor Alternatieven en Faculteit Diergeneeskunde Universiteit Utrecht. 24 April 2007. Lef In Het Lab Publieksprijs. **Prize winning presentation**
100. Leo TM van der Ven, Hellmuth Lilienthal, Ton van de Kuil, Aldert H Piersma. Endocrine effects of hexabromocyclododecane (HBCD) in a one-generation reproduction study in Wistar rats. Teratology Society 2007.
101. Janer, Piersma ea A retrospective analysis of the two-generation study: What is the added value of the second generation? Teratology Society 2007, European Teratology Society Bratislava, Slovakia, September 2007.
102. Singh, Piersma ea Altered Developmental (Fetal) Programming of the Mouse Mammary Gland in Female Offspring Following Maternal Dietary Exposures. Teratology Society Pittsburgh PA, June 2007.
103. Leo van der Ven, Raoul Kuiper, Piet Wester, Hellmuth Lilienthal, Aldert Piersma Evaluation of effects on development and reproduction via endocrine disrupting using *in vivo* rat and zebrafish toxicology models: the case of the brominated flame retardant TBBPA. International Conference on fetal programming and developmental toxicity, Torshavn, Faroe, 20-24 May 2007
104. Leo van der Ven, Dorien Verhallen, Aart Verhoef, Wout Slob, Aldert Piersma. Alternative *in vitro* test methods for developmental toxicity testing. International Conference on fetal programming and developmental toxicity, Torshavn, Faroe, 20-24 May 2007.
105. Gemma Janer, Wout Slob, Betty Hakkert, Theo Vermeire, Aldert Piersma. A retrospective analysis of developmental toxicity studies: what is the added value of the rabbit as an additional test species? European Teratology Society, Bratislava, Slovakia, September 2007.
106. Hellmuth Lilienthal, Leo van der Ven, Aldert Piersma and Joseph Vos. Analysis of benchmark doses to assess effects of brominated flame retardants on neurophysiological and behavioral responses in rats. Second Workshop on Low Dose Effects of Chemicals with Special Consideration of Phthalates, Berlin, April 26-28, 2007.
107. Hellmuth Lilienthal, Leo van der Ven, Aldert Piersma and Joseph Vos Auditory and neurobehavioural effects of exposure to brominated flame retardants in rats – evaluation of benchmark doses. European Teratology Society, Bratislava, Slovakia, September 2007.
108. C. Bastian, T. Knudsen, A. Singh, M. Luijten, A. De Vries, and A. Piersma. Systems-Based Analysis of Developmental Programming of Mammary Gland using Bayesian-Variable-Selection. 37th Annual meeting of the Int. Soc. Dental Research, Dallas, USA, April 2-5, 2008. **Prize winning presentation**
109. Vincent van Beelen, Mirjam Luijten, Anja Westerman, Aart Verhoef, Jeroen Pennings, Frederik-Jan van Schooten, Aldert Piersma. Embryotoxicity of retinoic acid in postimplantation

- rat whole embryo culture monitored with gene expression analysis. SOT Seattle WA, USA, March 16-20, 2008.
110. Aldert Piersma. A retrospective analysis of the two-generation study: what is the added value of the second generation? SOT Seattle WA, USA, March 16-20, 2008.
 111. Piersma AH. Reproductive toxicology, REACH and testing strategies. British Toxicology Society autumn meeting, Liverpool, 8-9 September 2008.
 112. Margriet Park, Wytske Annema, Anna Salvati, Iseult Lynch, Kenneth Dawson, Aldert Piersma en Wim de Jong. Size dependent cytotoxicity and inhibition of differentiation of mouse embryonic stem cells by well-characterized SiO₂ nanoparticles. Nanotoxicology conference abstract Zurich, 7-10 September 2008.
 113. Vincent van Beelen, Mirjam Luijten, Anja Westerman, Aart Verhoef, Jeroen Pennings, Frederik-Jan van Schooten, Aldert Piersma. Embryotoxicity of retinoic acid in postimplantation rat whole embryo culture: a genomics approach. European Teratology Society Annual Conference, Edinburgh, 21-24 September 2008.
 114. Dorien Verhallen, Peter J. Hendriksen, Jeroen L. Pennings, Frederik-Jan van Schooten, Aldert H. Piersma. Gene expression changes in differentiating embryonic stem cells induced by monobutylphthalate European Teratology Society Annual Conference, Edinburgh, 21-24 September 2008.
 115. Piersma AH. Reproductive toxicology, REACH and testing strategies. SETAC Brussels, 23-24 October 2008.
 116. Piersma AH. Reproductive risks. Masterclass Occupational Toxicology, Nijmegen University, 6 November 2008.
 117. Piersma AH. Reproductive toxicology, REACH and testing strategies. Industry Developmental toxicity Research Group, Midlands, UK, 12-13 November 2008.
 118. Piersma AH. Beoordeling van reproductietoxiciteit van chemische stoffen: de centrale plaats van de blootstellingsperiode in de reproductiecyclus. Voordracht Contactgroep Chemie, NOTOX, Dem Bosch, 12 March 2009.
 119. De Groot, Didima M.; De Groot, M.; De Esch, C.; Tonk, I.; Lammers, J.; Van Loveren, L.; Piersma, A.; Waalkens, I.; Wolterbeek, A.; Woutersen, R. Evaluation of physical, sensory and sexual landmarks in an extended one generation reproduction study: a comparison between classical NOAEL and a benchmark approach. SOT Baltimore MD, USA, 16-19 March 2009.
 120. Piersma AH. Embryonic stem cells and transcriptomics in developmental toxicity testing. INVITROM 3d Symposium, Den Bosch NL, 26 March 2009
 121. Piersma AH. The extended one-generation reproduction toxicity study: saving animals and improving hazard assessment? NVT jaarvergadering, Veldhoven NL, June 2009.
 122. Sanne A.B. Hermsen* 1 2 3, Evert-Jan van den Brandhof¹, Leo T.M. van der Ven¹, Aldert H. Piersma¹ 3 Relative embryotoxicity of glycolether metabolites in a modified zebrafish embryotoxicity assay Abstract 37th Annual ETS Conference Arles, France, September 2009
 123. Janer G, Slob W, Hakkert B, Vermeire T, Piersma AH A retrospective analysis of developmental toxicity studies in rat and rabbit: value of the rabbit as an additional test species and factors that influence this assessment Abstract 37th Annual ETS Conference Arles, France, September 2009

124. Tonk ECM, DMG de Groot, AH Penninks, DH Waalkens-Berendsen, APM Wolterbeek, AH Piersma, H van Loveren. Developmental Immunotoxicity Of Methylmercury: The Relative Sensitivity Of Developmental And Immune Parameters. Teratology Society 49th Annual Meeting, Puerto Rico, USA, June 2009, and ETS 37th Annual Conference Arles, France, September 2009. **Prize winning presentation**
125. Theunissen PT, van Dartel DAM, Schulp SHW, Hermsen SAB, van Schooten FJ, Piersma AH. Multilineage Neural Differentiation Of Murine Embryonic Stem Cells As An Alternative Test Model In Developmental Toxicology. Teratology Society 49th Annual Meeting, Puerto Rico, USA, June 2009 and 37th Annual ETS Conference Arles, France, September 2009.
126. D.A.M. van Dartel, A. Boorsma, J.L. Pennings, F.J. van Schooten, A.H. Piersma. Transcriptomics-based Identification of Developmental Toxicants through their Interference with Cardiomyocyte Differentiation of Embryonic Stem Cells. Teratology Society 49th Annual Meeting, Puerto Rico, USA, June 2009 and 37th Annual ETS Conference Arles, France, September 2009. **Prize winning presentation**
127. Esther de Jong, Jochem Louisse, Miriam Verwei, Bas J. Blaauboer, Han van de Sandt, Ruud A. Woutersen, Ivonne M.C.M. Rietjens, Aldert H. Piersma. Relative Developmental Toxicity Of Glycol Ethers In The Embryonic Stem Cell Test And Comparison To Their In Vivo Potency Ranking. Teratology Society 49th Annual Meeting, Puerto Rico, USA, June 2009 and 37th Annual ETS Conference Arles, France, September 2009.
128. Jochem Louisse, Esther de Jong, Johannes J.M. van de Sandt, Bas J. Blaauboer, Aldert H. Piersma, Ivonne M.C.M. Rietjens, Miriam Verwei. The use of *in vitro* toxicity data and Physiologically Based Kinetic modeling to predict *in vivo* embryotoxic effect levels. 7th World Congress on Alternatives & Animal Use in the Life Sciences, Rome, August 2009.
129. Piersma AH Computational Toxicology: Challenges for Regulatory Toxicology and Legislation. Teratology Society 49th Annual Meeting, Puerto Rico, USA, lecture, 2 July 2009.
130. Piersma AH Whole embryo cultures. ILSI HESI DART ETS satellite symposium lecture, Arles, 10 Sept 2009.
131. Theunissen PT, van Dartel DAM, Kleinjans JCS, van Schooten FJ, Piersma AH. Chemische veiligheid en het ongeboren kind. Een nieuwe, snelle en goedkope test zonder proefdieren. Poster STW marketing bijeenkomst, Den Bosch, 8 Oktober 2009.
132. Piersma A.H. Reproductive Toxicology and Chemicals Regulation in Europe. Course Lecture, SOT, 49th Annual Meeting, Salt Lake City, 7-11 March 2010.
133. Dorien A.M. van Dartel, Jeroen L.A. Pennings, Tessa E. Pronk, Marcel H. van Herwijnen, Joost H. van Delft, Frederik J. van Schooten, Aldert H. Piersma Transcriptomics-Based Identification of Developmental Toxicants by Their Modulation of Early Embryonic Stem Cell Differentiation. SOT, 49th Annual Meeting, Salt Lake City, 7-11 March 2010.
134. ECM Tonk, DMG de Groot, AH Penninks, DH Waalkens-Berendsen, APM Wolterbeek, AH Piersma, H van Loveren Developmental Immunotoxicity Of Methylmercury: The Relative Sensitivity Of Developmental And Immune Parameters. SOT, 49th Annual Meeting, Salt Lake City, 7-11 March 2010.
135. Piersma A.H.. Lifestyle, occupation and pregnancy. Invited lecture, De Snoo van 't Hoogerhuijs Foundation Annual Conference, Utrecht, 19 March 2010.
136. Piersma A.H.. Proefdieronderzoek versus in vitro methoden in een brede context. Invited lecture. Symposium "Alternatieven voor dierproeven", Aesclepios, Leiden, March 22, 2010.

137. A.H.Piersma. Reproductive Toxicology Session Introduction. Netherlands Society of Toxicology Annual Meeting, 2 June 2010, Woudschoten, Woudenberg, The Netherlands.
138. A.H.Piersma. The Embryonic Stem Cell Test, History and Progress. ICH Workshop on the Implementation of in vitro approaches in Developmental and Reproductive Toxicity Testing Strategies for Human Pharmaceuticals. 6 June 2010, Tallinn, Estonia.
139. A.H.Piersma. Reproductive Toxicology and the GHS for Classification & Labelling in Europe. ContactGroep Chemie Invited Lecture, 10 June 2010, Den Bosch, The Netherlands
140. Peter T Theunissen^{1,2}, Esther de Jong^{1,3}, Frederik J van Schooten², Aldert H Piersma. Effects of triazole antifungal compounds on neural differentiation of murine embryonic stem cells as determined by flow cytometry. Teratology Society 50th Annual Conference, Louisville KY, USA, 26-30 June 2010.
141. Ahmed M. Osman, Dorien A.M. van Dartel, Edwin Zwart, Marco Blokland, Jeroen L. A. Pennings, Aldert H. Piersma. Proteome profiling of mouse embryonic stem cells to define markers for cell differentiation and embryotoxicity. Free communication lecture, Teratology Society 50th Annual Conference, Louisville KY, USA, 26-30 June 2010;
142. Piersma AH. The extended one-generation reproduction toxicity study: Improving hazard assessment and saving animals? Invited Lecture, Teratology Society 50th Annual Conference, Louisville KY, USA, 26-30 June 2010; ETS-TS Debate, European Teratology Society 38th Annual Conference, Barcelona, Spain, 5-8 September 2010.
143. Esther de Jong, Marta Barenys, Aart Verhoef, Aldert H. Piersma. Relative Developmental Toxicity Of Triazoles In The Embryonic Stem Cell Test And The Whole Embryo Culture. Teratology Society 50th Annual Conference, Louisville KY, USA, 26-30 June 2010; European Teratology Society 38th Annual Conference, Barcelona, Spain, 5-8 September 2010.
144. Mats F. Nilsson, Birger Scholz, Khalid M. Khan, Aldert H. Piersma and Lennart Dencker. Rodent Organogenesis Toxicology Ontology (ROTO): Linking Morphology to Embryotoxicity. Teratology Society 50th Annual Conference, Louisville KY, USA, 26-30 June 2010.
145. Joshua F. Robinson, Aart Verhoef, Vincent van Beelen, Jeroen Pennings, Elaine M. Faustman, Aldert H. Piersma. Investigating toxicogenomic parallels between in vivo- and in vitro-based models used for developmental toxicology. European Teratology Society 38th Annual Conference, Barcelona, Spain, 5-8 September 2010.
146. Sanne A.B. Hermsen, Evert-Jan van den Brandhof, Aldert H. Piersma. Relative embryotoxicity of 1,2,4-triazoles in the zebrafish embryotoxicity test and comparison with their in vivo potencies. European Teratology Society 38th Annual Conference, Barcelona, Spain, 5-8 September 2010.
147. Ahmed M. Osman, Sjors H.W. Schulpen, Dorien A.M. van Dartel, Edwin Zwart, Marco Blokland, Jeroen L. A. Pennings, Aldert H. Piersma. Proteome profiling of mouse embryonic stem cells to define markers for cell differentiation and chemical-mediated embryotoxicity. Teratology Society 50th Annual Conference, Louisville KY, USA, 26-30 June 2010 and European Teratology Society 38th Annual Conference, Barcelona, Spain, 5-8 September 2010.
148. A.H.Piersma. Innovations in regulatory reproductive toxicology. Conference lecture, AgChem Forum, Lyon, France, 8-9 September 2010.
149. A.H.Piersma. The extended one generation reproductive toxicity study: principles, practice and politics. Najaarsvergadering Ned.Ver.Toxicologie, secties risk assessment & reproductive toxicology, TNO, Zeist, 23 november 2010.

150. A.H.Piersma. IPAM TOX21 Conference lecture, Milan, Italy, 26 November 2010.
151. Joshua F. Robinson, Peter Theunissen, Dorien van Dartel, Jeroen Pennings, Elaine M. Faustman, Aldert H. Piersma. Examination of MeHg-induced toxicogenomic response across *in vivo* and *in vitro* models used for developmental toxicology. SOT 50th Annual Meeting, Washington DC USA, 6-10 March 2011. Abstract. **Prize winning presentation**
152. Esther de Jong, Marta Barenys, Sanne Hermsen, Aart Verhoef, Aldert Piersma. Comparison of the Embryonic Stem cell Test, the Whole Embryo Culture and the Zebrafish Embryo Test as alternative methods for developmental toxicity testing of triazoles. SOT 50th Annual Meeting, Washington DC USA, 6-10 March 2011. Abstract.
153. Peter T Theunissen, Jeroen Pennings, Jos CS Kleinjans, Joshua F Robinson, Aldert H Piersma Methyl mercury induced perturbation of neural differentiation of murine embryonic stem cells over time described by transcriptomics. SOT 50th Annual Meeting, Washington DC USA, 6-10 March 2011. Abstract.
154. Jochem Louisse, Esther de Jong, Johannes J.M. van de Sandt, Bas J. Blaauboer, Ruud A. Woutersen, Aldert H. Piersma, Ivonne M.C.M. Rietjens, Miriam Verwei. The use of *in vitro* toxicity data and physiologically based kinetic modeling to predict dose-response curves for *in vivo* developmental toxicity of glycol ethers in rat and man. SOT 50th Annual Meeting, Washington DC USA, 6-10 March 2011. Abstract.
155. Maarke J.E. Roelofs, Martin van den Berg, Aldert H. Piersma, Majorie B.M. van Duursen Porcine adrenal cortex microsomes as *in vitro* alternative assay for screening on sex steroidogenesis toxicity. SOT 50th Annual Meeting, Washington DC USA, 6-10 March 2011. Abstract.
156. George P. Daston, Robert E Chapin, Anthony R. Scialli, Aldert H. Piersma, Edward W. Carney, John M. Rogers, Jan M. Friedman. Validation of Screening Assays for Developmental Toxicity: An Exposure-Based Approach. SOT 50th Annual Meeting, Washington DC USA, 6-10 March 2011. Abstract.
157. Aldert H. Piersma. Embryonic stem cell approaches for the derivation of biomarkers of embryotoxicity. British Toxicology Society Joint Spring Meeting with the Dutch Society of Toxicology, Durham University, UK, 27-30 March 2011.
158. Aldert Piersma. Chemische veiligheid en proefdieren: het kan beter met minder. Gastcolumn op www.kennislink.nl, 5 Mei 2011: <http://www.kennislink.nl/publicaties/chemische-veiligheid-en-dierproeven-het-kan-beter-met-minder>.
159. Aldert H. Piersma. ES differentiation & molecular endpoints. AXLR8-2 Workshop "Innovative Toxicity Testing Strategies", Berlin DE, 23-25 May 2011.
160. Aldert H.Piersma. Male fertility and the need for alternative methods. The European perspective. HESI-DART Worskshop on Testicular Toxicity, Washongton DC, USA, 20 may 2011.
161. Sanne A.B. Hermsen, Tessa E. Pronk, Evert-J. van den Brandhof, Leo T.M. van der Ven, Aldert H. Piersma. Class-specific gene expression changes in the zebrafish embryo after exposure to three glycol ether alkoxy acids and two 1,2,4-triazole antifungals. Teratology Society 51st Annual Meeting, San Diego CA, 25-29 June 2011; 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Abstract. **Prize winning presentation**
162. Elisa CM Tonk, Aart Verhoef, Liset JJ de la Fonteyne, Henk van Loveren Aldert H Piersma Developmental Immunotoxicity in Male Rats After Juvenile Exposure To Di-octyltin dichloride. Teratology Society 51st Annual Meeting, San Diego CA, 25-29 June 2011, Abstract.

163. Elisa CM Tonk, Aart Verhoef, Eric R Gremmer, Henk van Loveren, Aldert H Piersma. Relative Sensitivity of Reproductive and Immune Parameters in Juvenile Versus Adult Rats after Exposure to Di-(2-ethylhexyl) Phthalate (DEHP) Teratology Society 51st Annual Meeting, San Diego CA, 25-29 June 2011, Abstract.
164. Joshua F. Robinson, Aart Verhoef, Aldert H. Piersma. Comparison of Retinoic Acid Teratogenesis between In Vivo and In Vitro Models by transcriptomics. Teratology Society 51st Annual Meeting, San Diego CA, 25-29 June 2011, Abstract.
165. A.H. Piersma, E. Rorije, M.E.W. Beekhuijzen, R. Cooper, D.J. Dix, B. Heinrich-Hirsch, M.T. Martin, E. Mendez, A. Muller, M. Paparella, D. Ramsingh, E. Reaves, P. Ridgway, E. Schenk, L. Stachiw, B. Ulbrich, B.C. Hakkert. Combined retrospective analysis of 498 rat multi-generation reproductive toxicity studies: On the impact of parameters related to F1 mating and F2 offspring. Teratology Society 51st Annual Meeting, San Diego CA, 25-29 June 2011, Abstract.
166. Elisa C Tonk, Aart Verhoef, Liset J de la Fonteyne, Ine D Waalkens-Berendsen, André P Wolterbeek, Henk van Loveren, Aldert H Piersma. Di-*n*-octyltin dichloride (DOTC) induced developmental immunotoxicity in male rats after juvenile exposure. 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Abstract.
167. Peter T. Theunissen, Pennings JLA, Robinson JF, Claessen SMH, Kleinjans JCS, Piersma AH. Methylmercury induced perturbation of murine embryonic stem cell neural differentiation over time described by transcriptomics. 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Abstract.
168. Sjors H W Schulpen, Dorien van Dartel, Jeroen Pennings, Joshua Robinson, Aldert H Piersma. Dose response analysis of four monophthalates in the murine embryonic stem cell test assessed by cardiomyocyte differentiation and gene expression. . 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Abstract.
169. Esther de Jong, Lianne van Beek Aldert H. Piersma. The Effect Of Five Teratogenic Compounds On The Differentiation Of Murine Embryonic Stem Cells Into Osteoblasts. 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Abstract.
170. Joshua Robinson, Aart Verhoef, Jeroen Pennings, Aldert Piersma. A Comparison between In Vivo and Whole Embryo Culture using Transcriptomics: Developmental Changes, Model Differences and Teratogenic Response. 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Abstract. **Prize winning presentation**
171. Aldert Piersma. Juvenile Toxicity Approaches for Chemicals. Impact on OECD Guidelines. 39th Annual Conference of the European Teratology Society, Gent, Belgium, 4-7 September 2011, Lecture.
172. Virissa Lenters, Bo AG Jönsson, Cathrine Thomsen, Lars Rylander, Gunnar Toft, Jens Peter Bonde, Aldert H Piersma, Roel Vermeulen, Dick Heederik. Interrelationships between blood serum levels of persistent organic pollutants and their determinants in inuit, polish and ukrainian males (CLEAR project). 23d Conference of the International Society of Experimental Epidemiology, Barcelona, 13-16 September 2011, Abstract.
173. Aldert H. Piersma. Rabbit versus Rat in Reproductive Toxicology Chemicals Legislation. DART Testing Strategies for Human Pharmaceuticals: Animal Models vs In-Vitro Approaches. DIA Pharma Event #11116, Leiden, the Netherlands, 10-11 October 2011, Lecture.
174. Aldert H. Piersma. Implementation of new approaches in reproductive toxicity testing. CAAT-Johns Hopkins University, Baltimore MD, 28 October 2011, Seminar.

175. Aldert H. Piersma. The need for alternative models for testicular toxicity testing. INVITROM Annual Meeting, 12 December 2011, Utrecht, the Netherlands, Invited Lecture.
176. Aldert H. Piersma. The challenge of replacing animals in basic research. Minisymposium on human stem cell-derived cardiomyocytes for safety pharmacology: what does the future look like? UMC Utrecht, 16 December 2011, Invited Lecture.
177. Aldert H. Piersma. Test strategies and alternative approaches for developmental and reproductive toxicity from the European regulatory perspective. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, Invited Lecture.
178. Aldert H. Piersma. Transcriptomics approaches towards biomarkers of embryotoxicity in the embryonic stem cell test. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, Invited Lecture.
179. Sanne A.B. Hermsen, Tessa E. Pronk, Evert-Jan van den Brandhof, Leo T.M. van der Ven, Aldert H. Piersma. Concentration-response analysis of differential gene expression in the zebrafish embryotoxicity test following flusilazole exposure. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, abstract.
180. Sjors H W Schulpen, Joshua Robinson, Jeroen Pennings, Aldert H Piersma. Potency ranking of monophthalates studied by transcriptomics in the mouse embryonic stem cell test. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, abstract.
181. Joshua F. Robinson, Aart Verhoef, Jeroen Pennings, Aldert H. Piersma. A Transcriptomic Approach to Quantify Dose-Response Sensitivity to Phthalates in WEC. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, abstract.
182. Joshua F. Robinson, Aart Verhoef, Jeroen Pennings, Aldert H. Piersma. A Comparison between *In Vivo* and Whole Embryo Culture using Transcriptomics: Developmental Changes, Model Differences and Teratogenic Response. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, abstract.
183. Maarke J.E. Roelofs, Maria E. Flores Guillén, Martin van den Berg, Bas J. Blaauboer, Aldert H. Piersma, Majorie B.M. van Duursen. Endocrine disrupting effects of conazole fungicides on male sex steroidogenesis. SOT 51st Annual Meeting, 11-15 March 2012, San Francisco CA USA, Abstract.
184. Aldert H. Piersma. Toxicogenomics in the Embryonic Stem Cell Test. XLR8 Berlin 11-13 June 2012. Invited Lecture.
185. Aldert H. Piersma. Proteomic versus genomic markers for cell differentiation and embryotoxicity. Eurotox Stockholm, 17-20 June 2012. Invited Lecture.
186. Aldert H. Piersma. Approaches for predicting developmental toxicity: an integrated testing strategy. Teratology Society 52d Annual Meeting, Baltimore MD, 23-27 June 2012, Invited Lecture.
187. Joshua F. Robinson, Elisa C.M. Tonk, Aart Verhoef, Vincent A. van Beelen, Jeroen L.A. Pennings, Aldert H. Piersma. Dose-Response Analysis of Phthalate Effects on Gene Expression in Rat Whole Embryo Culture. 52nd Annual Meeting of the Teratology Society, Baltimore MD, 23-27 June 2012, Abstract.
188. Joshua F. Robinson, Elisa C.M. Tonk, Aart Verhoef, Sanne A.B. Hermsen, Dorien A.M. van Dartel, Jeroen L.A. Pennings, Aldert H. Piersma. Triazole Induced Concentration-Related Gene Signatures in Rat Whole Embryo Culture. 52nd Annual Meeting of the Teratology Society, Baltimore MD, 23-27 June 2012, Abstract.

189. Elisa CM Tonk, Aart Verhoef, André PM Wolterbeek, Ine DH Waalkens-Berendsen, Henk van Loveren, Aldert H Piersma. Developmental Immunotoxicity of Ethanol in EOGRTS and Juvenile Exposure Designs. 52nd Annual Meeting of the Teratology Society, Baltimore MD, 23-27 June 2012, Abstract.
190. Joshua F. Robinson, Elisa C.M. Tonk, Aart Verhoef, Sanne Hermsen, Dorien van Dartel, Jeroen L.A. Pennings, Aldert H. Piersma. Triazole Induced Concentration-Related Gene Signatures in Rat Whole Embryo Culture. 40th Annual Conference of the European Teratology Society, Linz, Austria, 2-5 September 2012, Abstract.
191. Elisa C.M. Tonk, Joshua F. Robinson, Jeroen L. Pennings, Aldert H. Piersma. Transcriptomics applications in in vitro embryotoxicity assessment. 40th Annual Conference of the European Teratology Society, Linz, Austria, 2-5 September 2012, Abstract.
192. Sanne A.B. Hermsen, Tessa E. Pronk, Evert-Jan van den Brandhof, Leo T.M. van der Ven, Aldert H. Piersma. Zebrafish embryotoxicity assessed by morphology and transcriptomics. 40th Annual Conference of the European Teratology Society, Linz, Austria, 2-5 September 2012, Abstract.
193. van Dartel DAM and Piersma AH. The embryonic stem cell test combined with toxicogenomics as an alternative testing model for the assessment of developmental toxicity. 40th Annual Conference of the European Teratology Society, Linz, Austria, 2-5 September 2012. **Elsevier Best RTX 2011 Manuscript Award Lecture.**
194. Piersma A.H. Embryonic Stem Cell approaches towards biomarkers of embryotoxicity. EUSAAT, Linz, Austria, 5-8 September 2012, Invited Lecture.
195. Theunissen P.T., Piersma A.H. Neural embryonic stem cell test. EUSAAT, Linz, Austria, 5-8 September 2012, Invited Lecture.
196. Jeroen L.A. Pennings, Dorien A.M. van Dartel, Joshua F. Robinson, Tessa E. Pronk, Aldert H. Piersma An optimized biomarker set for developmental toxicity prediction using embryonic stem cell test transcriptomics. European Conference on Computational Biology, 9-12 September 2012, Basel, Switzerland.
197. Aldert H. Piersma and Sanne A.B. Hermsen. Developmental toxicity of triazoles assessed by transcriptomics in the zebrafish embryotoxicity assay. Symposium Fish and Amphibian Embryos as alternative models in toxicology and teratology. Aulnay-sous-Bois, Paris, France, 11-12 October 2012, Invited Lecture.
198. Aldert H. Piersma. Toxicogenomic approaches in developmental toxicology. Toxicology Forum, Brussels, 23-25 October 2012, Invited Lecture.
199. Aldert H. Piersma. Reproductive Toxicology. Of mice and man and molecules. IVTS London, UK, 20-21 November 2012, Invited Lecture.
200. Aldert H. Piersma. Reproductive Toxicology. Of mice and men and molecules. Belttox Edegem, Belgium, 3 December 2012, Invited lecture.
201. Aldert H. Piersma. Dose and time dependent genomic responses to reproductive toxicants. 3d Omics Workshop, Malaga, Spain, 25-26 February 2013.
202. Tonk E.C.M, A. Verhoef, E.R. Gremmer, H. van Loveren, A.H. Piersma. Developmental Immunotoxicity Testing for Hazard Identification. SOT 52nd Annual Meeting, 10-14 March 2013, San Antonio TX, USA, and Teratology Society 53^d Annual Meeting, 22-26 June 2013, Tucson AZ, USA.

203. Theunissen PT, Pennings JLA, van Dartel DAM, Robinson JF, Kleinjans JCS, Piersma A transcriptomic comparison between the neural and cardiac embryonic stem cell tests (ESTn and ESTc). SOT 52nd Annual Meeting, 10-14 March 2013, San Antonio TX, USA and Teratology Society 53^d Annual Meeting, 22-26 June 2013, Tucson AZ, USA.
204. Sanne A.B. Hermesen, Tessa E. Pronk, Evert-Jan van den Brandhof, Leo T.M. van der Ven, Aldert H. Piersma. Triazole-induced gene expression changes in the zebrafish embryo. SOT 52nd Annual Meeting, 10-14 March 2013, San Antonio TX, USA and Teratology Society 53^d Annual Meeting, 22-26 June 2013, Tucson AZ, USA.
205. Roelofs, Maarke; Dankers, Anita; Piersma, Aldert H.; Russel, Frans; Masereeuw, Rosalinde; van Duursen, Majorie B. BPA AND tbbpa target ATP binding cassette transporters in the blood-testis barrier and impair Leydig cell steroidogenesis. SOT 52nd Annual Meeting, 10-14 March 2013, San Antonio TX, USA.
206. Virissa Lenters, Lützen Portengen, Anna Rignell-Hydbom, Bo AG Jönsson, Christian H Lindh, Jan K Ludwicki, Henning S Pedersen, Valentyna Zviezdai, Aldert H Piersma, Gunnar Toft, Jens Peter Bonde, Dick Heederik, Lars Rylander, Roel Vermeulen Exposure to phthalates, perfluorinated compounds and organochlorines and pregnancy outcomes in women from Greenland, Poland and Ukraine. EPICOH 23d Conference on Epidemiology in Occupational Health, 18-21 June 2013, Utrecht, Netherlands.
207. Maarke J.E. Roelofs, Anita C.A. Dankers, Aldert H. Piersma, Frans G.M. Russel, Martin van den Berg, Rosalinde Masereeuw, Majorie B.M. van Duursen. Endocrine disruptors target ATP binding cassette transporters in the blood-testis barrier and impair Leydig cell steroidogenesis. European Congress of Endocrinology, Copenhagen, 27 April-1 May 2013.
208. Virissa Lenters, Lützen Portengen, Anna Rignell-Hydbom, Bo AG Jönsson, Christian H Lindh, Aldert H Piersma, Gunnar Toft, Jens Peter Bonde, Dick Heederik, Lars Rylander, Roel Vermeulen. Penalized multivariate analysis of prenatal exposure to phthalates, perfluorinated compounds and organochlorines and birth weight. ISEE Conference, 18-23 August 2013, Basel, Switzerland.
209. Aldert H. Piersma. Review of recent experimental evidence: phthalates and male reproductive endpoints. Invited Lecture, Int. Soc. Envir. Epidemiology Conference, 18-23 August 2013, Basel, Switzerland.
210. Aldert H. Piersma, Elisa C.M. Tonk, Henk van Loveren. Analysis of immune toxicity in the extended one-generation reproduction toxicity study. Invited Lecture, EUROTOX 49th Congress, September 1-4, 2013, Interlaken, Switzerland.
211. Aldert H. Piersma, Elisa C.M. Tonk, Henk van Loveren. Juvenile safety testing for chemicals and pesticides. Invited Lecture, EUROTOX 49th Congress, September 1-4 2013, Interlaken, Switzerland.
212. Aldert H. Piersma. Bottlenecks for the implementation of alternative methods in regulatory reproductive and developmental toxicity testing. European Teratology Society 41th Annual Meeting, 8-11 September 2013, Stresa, Italy.
213. Aldert H. Piersma. Cross-industry data survey of the value of rabbit developmental toxicity data in the risk assessment for pharmaceuticals. Scientific background. European Teratology Society 41th Annual Meeting, 8-11 September 2013, Stresa, Italy.
214. Sjors H.W. Schulp, Liset J.J. de la Fonteijne, Arja de Klerk, Aldert H. Piersma. The application of human embryonic stem cells within an in vitro assay for developmental toxicity testing. European Teratology Society 41th Annual Meeting, 8-11 September 2013, Stresa, Italy.

215. Stewart J, Piersma AH, Theunissen PT, Cappon G, Beken S. Cross-industry data survey of the value of rabbit developmental toxicity data in the risk assessment for pharmaceuticals. European Teratology Society 41th Annual Meeting, 8-11 September 2013, Stresa, Italy.
216. Aldert H. Piersma. Enhancing the readout of the embryonic stem cell test with molecular approaches. Invited Lecture. ESNATS conference, 16 September 2013, Linz, Austria.
217. Aldert H. Piersma. Alternative methods in reproductive toxicology. Lecture. Postdoctoral course: "Identification and assessment of reproductive toxicity and endocrine disruption", Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden, 26 November 2013.
218. Marc A.T. Teunis; Daniëlle Fiechter; Peter T. Theunissen; Giel Hendriks; Cyrille A.M. Krul; Aldert H. Piersma. Using Quantitative Cellular Responses to Assess Developmental Toxicity of Compounds in a (Mouse and Human) Stem Cell Reporter System. SOT 23-27 March 2014, Phoenix AZ.
219. Maarke J.E. Roelofs, A. Roberto Temming, Aldert H. Piersma, Martin van den Berg, Majorie B.M. van Duursen. Conazole Fungicides Inhibit Leydig cell Testosterone Secretion and Androgen Receptor Activation in vitro. SOT 23-27 March 2014, Phoenix AZ.
220. Piersma A.H. Alternative test methods in developmental toxicology. DGPT (Deutsche Gemeinschaft für Pharmakologie und Toxicologie) Annual Meeting, Hannover, 3 April 2014. Invited Lecture.
221. Piersma AH. Is negligible exposure applicable for developmental effects? 8th Berlin Workshop on Developmental toxicology, May 14-16, 2014, Berlin, Germany.
222. Majorie van Duursen, Marjolein Wildwater, Raymond Pieters, Bart van der Burg and Aldert Piersma. Innovative and integrative testing strategies for developmental and reproductive toxicity: Chemscreen and Crack it PreDART. NVT June 19-20, 2014, Veldhoven NL.
223. Jomaa B, Hermsen SAB, Kessels MY, van den Berg JHJ, Peijnenburg AACM, AArts JMMJG, Piersma AH, Rietjens MCM. A zebrafish embryotoxicity test detects the developmental toxicity of thyroid-active compounds. NVT June 19-20, 2014, Veldhoven NL EUROTOX 50th Congress, Edinburgh, 7-10 September 2014.
224. Teunis, Fiechter, Mika, Lai, Theunissen, Hendriks, Verkoeijen, Pierma, Krul. Using Cellular Signals to Assess Developmental Toxicity of Compounds in a Mouse Embryonic Stem Cell System. ESTIV 2014 meeting, Egmond aan Zee, June 10-14, 2014, 9th World Congress on Alternatives and Animal Use in the Life Sciences, 24-28 August 2014, prague, Czech Republic.
225. Sjors H.W. Schulpen, Liset J.J. de la Fonteyne, Arja de Klerk, Aldert H. Piersma The effects of Carbamazepine and Valproic acid on gene expression in a human embryonic stem cell based assay for neuro-developmental toxicity. Stem Cell Conference, Canada, June 2014; Teratology Society 54th Annual Meeting, 28 June – 2 July 2014, Bellevue WA, USA.
226. Piersma AH, Theunissen PT. An analysis of rat and rabbit developmental toxicity studies for pharmaceuticals; the scientific background. Teratology Society 54th Annual Meeting, 28 June – 2 July 2014, Bellevue WA, USA.
227. Theunissen PT, Piersma AH. A comprehensive data survey of the relative value of rat versus rabbit developmental toxicity data in the risk assessment for pharmaceuticals: Presentation of results. Teratology Society 54th Annual Meeting, 28 June – 2 July 2014, Bellevue WA, USA.
228. Sanne A.B. Hermsen, Tessa E. Pronk, Evert-Jan van den Brandhof, Leo T.M. van der Ven, Aldert H. Piersma. Defining a transcriptomic signature for developmental toxicity prediction in

- the zebrafish embryo. Teratology Society 54th Annual Meeting, 28 June – 2 July 2014, Bellevue WA, USA.
229. Lidwien A.M. Smit, Virissa Lenters, Birgit Bjerre Høyer, Christian H. Lindh, Henning S. Pedersen, Valentyna Zvezdai, Bo A.G. Jönsson, Aldert H. Piersma, Jens Peter Bonde, Gunnar Toft, Roel Vermeulen, Dick Heederik. Prenatal exposure to environmental contaminants and asthma and eczema in school-age children. European Respiratory Society's Annual conference, Munich, Germany, 6-10 September 2014.
230. Peter T Theunissen, Jan-Willem van der Laan, Aldert H Piersma, Jane Stewart, Alan Hoberman, Greg Cappon, Connie Chen. A comprehensive data survey of the relative value of rat versus rabbit developmental toxicity data in the risk assessment for pharmaceuticals. Japanese SOT 2014.
231. Virissa Lenters, Lützen Portengen, Anna Rignell-Hydbom, Bo AG Jönsson, Christian H Lindh, Aldert H Piersma, Gunnar Toft, Jens Peter Bonde, Dick Heederik, Lars Rylander, Roel Vermeulen. Prenatal exposure to phthalates, perfluoroalkyl substances and organochlorines and birth weight. 14th ISEE Conference, 2014.
232. Kok Wah Hew, Peter T Theunissen, Jan-Willem van der Laan, Aldert H Piersma, Jane Stewart, Alan Hoberman, Greg Cappon, Connie Chen. The relative value of rat versus rabbit developmental toxicity data in the risk assessment for pharmaceuticals – An industry survey. Japanese Teratology Society Meeting, July 2014.
233. Aldert H. Piersma. Adverse outcome pathway based battery approaches in an alternative strategy for reproductive toxicity testing. European Teratology Society 42nd Annual Meeting, 1-4 September 2014, Hamburg, Germany.
234. Aldert H. Piersma. Evaluation of an alternative in vitro test battery for detecting reproductive toxicants. **Elsevier RTX Best Manuscript Award Lecture**. European Teratology Society 42nd Annual Meeting, 1-4 September 2014, Hamburg, Germany.
235. Aldert H. Piersma Integrated Testing Strategies in meeting regulatory information requirements. Invited Lecture. EUROTOX 50th Congress, Edinburgh, 7-10 September 2014.
236. Aldert H. Piersma. Low-dose effects: experimental challenges for endocrine disruption. Invited Lecture, EUROTOX 50th Congress, Edinburgh, 7-10 September 2014.
237. G. Daston, A. Scialli, B. Beyer, E. Carney, R. Chapin, J. Friedman, A. Piersma, J. Rogers. An Exposure-Based Validation List for Developmental Toxicity Assays. 9th World Congress on Alternatives to Animal Testing, Prague, Czech Republic, 2014.
238. B. van der Burg, E. Bay Wedebye, D. R. Dietrich, J. Jaworska, I. Mangelsdorf, E. Paune, M. Schwarz, A. H. Piersma and E. D. Kroese The ChemScreen project to design a pragmatic alternative approach to predict reproductive toxicity of chemicals. 9th World Congress on Alternatives to Animal Testing, Prague, Czech Republic, 2014.
239. M. A. T. Teunis S. Verkoeijen, P. Mika, K. Lai, P. T. Theunissen, A. H. Piersma and C. A. M. Krul. Using cellular signals to assess developmental toxicity of compounds in a mouse embryonic stem cell system. 9th World Congress on Alternatives to Animal Testing, Prague, Czech Republic, Aug 2014.
240. Van Duursen M, Vrolijk RQ, Dingemans MML, Schulpen SSH, Piersma AH. Neuronal differentiation and epigenetic modulation of the androgen receptor in vitro. PPTOX IV Conference, Oct 26–29, 2014 Boston, MA, USA.

241. Piersma AH. Innovative testing in reproductive and developmental toxicology. Lecture, Symposium of the Dutch Society of Toxicology (NVT), Section Occupational Toxicology and the Contact Group Chemistry (CGC), Den Bosch, 12 March 2015.
242. Piersma, Aldert; Theunissen, Peter; Beken, Sonja; Cappon, Gregg D; Chen, Connie L; Harrouk, Wafa A; Hoberman, Alan; van der Laan, Jan-Willem; Stewart, Jane. A comparison of rat and rabbit developmental toxicity study outcomes of more than 400 pharmaceutical compounds. SOT, March 22-26, San Diego CA, 2015; Teratology Society Conference, Montreal, Canada, 28 June – 1 July 2015.
243. Piersma AH, Pennings JL; Tonk ECM. An adverse outcome pathway framework for neural tube and axial defects mediated by modulation of retinoic acid homeostasis. SOT March 22-26, San Diego CA, 2015; Teratology Society Conference, Montreal, Canada, 28 June – 1 July 2015; European Teratology Society Annual Conference, Amsterdam, NL, 30 August-2 September 2015.
244. Piersma AH. EOGRTS: background, issues and considerations. Lecture, IRDG meeting, East Midlands, UK, 12 May 2015.
245. Sjors H.W. Schulpen, Liset J.J. de la Fonteyne, Arja de Klerk, Aldert H. Piersma. The application of mouse and human embryonic stem cells to study (neuro) developmental toxicity using transcriptomics. Dutch Society of Toxicology Annual Meeting, 4-5 June 2015, Soesterberg, the Netherlands.
246. Myrto Dimopoulou, Aart Verhoef, Bennard van Ravenzwaay, Ivonne M. C. M. Rietjens, Aldert H. Piersma. Developmental stage-specific gene regulation in the rat Whole Embryo Culture induced by Flusilazole. Dutch Society of Toxicology Annual Meeting, Soesterberg, the Netherlands, 5 June 2015; European Teratology Society Annual Conference, Amsterdam, NL, 30 August-2 September 2015.
247. Piersma AH. Next Steps for Adverse Outcome Pathways An Adverse Outcome Pathway Framework for Neural Tube and Axial Defects Mediated by Modulation of Retinoic Acid Homeostasis. ICCA-LRI and U.S. EPA Workshop: What will work? Application of new approaches for chemical safety assessment. New Orleans LA, USA, June 16-17, 2015.
248. Theunissen PT, Beken S, Cappon G.D., Chen C, Harrouk W, Hoberman AM, Stewart J, Van der Laan JW, Piersma AH. A comparison of rat and rabbit developmental toxicity study outcomes of 379 pharmaceutical compounds. Teratology Society Conference, Montreal, Canada, 28 June – 1 July 2015; European Teratology Society Annual Conference, Amsterdam, NL, 30 August-2 September 2015.
249. Aldert H. Piersma. Molecular biomarkers in mechanistic studies for detecting developmental toxicity. Prague EEMGS meeting 23-26 August 2015, invited lecture.
250. Aldert H. Piersma. Developmental immunotoxicity testing. Berlin SafeSciMed Toxicology Course Lecture, 9 September 2015.
251. Aldert H. Piersma. An adverse outcome pathway framework for neural tube and axial defects mediated by modulation of retinoic acid homeostasis. Barcelona AgChem Forum, 23-24 September 2015, invited lecture.
252. Aldert H. Piersma. Low dose in endocrine disruption. Endocrine Disrupters Conference, ChemAcademy, Berlin, 12-14 October 2015, invited lecture.
253. Aldert H. Piersma. Alternatives in reproductive toxicity testing. Van Genderen Symposium, 16 October 2015, Utrecht, The Netherlands.

254. Aldert H Piersma. Low-dose effects: experimental challenges for endocrine disruption. 2nd French Workshop on Endocrine disruption in wildlife and human health, Paris, 21-22 January 2016.
255. Aldert H Piersma. Integrative analysis of omics data in predictive developmental toxicity Systems Toxicology – real world applications and opportunities. SWISSTOX meeting, Les Diablerets, Switzerland, Jan. 27 – 29, 2016. Invited lecture.
256. Sander C.S. Clahsen, Holly S. van Klaveren, Aldert H. Piersma, Erik Lebret, Betty C. Hakkert, Theo G. Vermeire, Bart J. Garssen. Analysis of argumentation in the scientific debate on endocrine disrupting chemicals risk assessment and management using pragma-dialectical theory: a pilot study. Society for Risk Analysis - Europe - Benelux chapter inaugural meeting in Brussel, op 14 March 2016; Society for Risk Analysis – Europe meeting, Bath, UK, 20-22 June 2016.
257. Aldert H. Piersma. Endocrine disruption. Invited Lecture, 25th Anniversary Conference of the Dutch Society for Occupational Hygiene, Kurhaus, Scheveningen, the Netherlands, 14 April 2016.
258. Aldert H. Piersma. Plooiën en Vouwen. Symposium Proefdiervrij-RIVM-IRAS, Aula, Utrecht University, Utrecht, the Netherlands, 27 May 2016.
259. Sander C.S. Clahsen, Aldert H. Piersma, Erik Lebret, Betty C. Hakkert, Theo G. Vermeire, Irene van Kamp Actor roles and interaction in the governance of environmental health risk problems: an interdisciplinary, theoretical review. Society for Risk Analysis - Europe - Benelux chapter inaugural meeting in Brussel, op 14 March 2016; Society for Risk Analysis – Europe meeting, Bath, UK, 20-22 June 2016.
260. Myrto Dimopoulou, Aart Verhoef, Bennard Van Ravenzwaay, Ivonne M.C.M. Rietjens, Aldert H. Piersma. A transcriptomic approach for a mechanistic insight into developmental toxicity of azoles in the rat Whole Embryo Culture. EUROTOX Sevilla, 4-7 September 2016.
261. Aldert Piersma, Andre Muller. The extended one generation reproduction toxicity study: Expectations for the new guideline, opportunities, threats. EUROTOX Sevilla, 4-7 September 2016.
262. Aldert H. Piersma. Can we transition to animal free human hazard and risk assessment of chemicals and pharmaceuticals? Lunchbreak Discussion Session, ETS Annual Conference, Dublin, September 2016.
263. Dimopoulou M, Verhoef A, van Ravenzwaay B, Rietjens IMCM, Piersma AH. Identification of molecular biomarkers for screening the mechanism of azoles' developmental toxicity in the rat Whole Embryo Culture. ETS Annual Conference, Dublin, September 2016.
264. Myrto Dimopoulou, Aart Verhoef, Jeroen Pennings, Bennard van Ravenzwaay, Ivonne M.C.M. Rietjens and Aldert H. Piersma. A transcriptomic analysis for classifying six azoles regarding their embryotoxic potency in the rat Whole Embryo Culture. ETS Annual Conference, Dublin, September 2016.
265. Aldert H. Piersma. Human developmental toxicology predicted through ontologies. The retinoic acid pathway in vertebrate embryo development. Brussels RA SEG Meeting 25-26 October 2016.
266. Aldert H. Piersma. Adverse outcome pathways and genomics. Panel Discussion Introductory Lecture 18th Annual Cefic-LRI Workshop, Brussels, November 16-17, 2016.
267. Yvonne C.M. Staal, Nancy Baker, Lyle D. Burgoon, George Daston, Thomas B. Knudsen, Aldert H. Piersma Towards Building an AOP-based Prenatal Developmental Toxicity

- Ontology. Poster presentation, 18th Annual Cefic-LRI Workshop, Brussels, November 16-17, 2016.
268. Aldert H. Piersma. Human Toxicology predicted through Ontology Models. The retinoic acid pathway in vertebrate embryo development as an example. Invited Lecture, Repeat Dose Toxicity Workshop, Cosmetics Europe, Brussels, Belgium, December 12-14, 2016.
269. Yvonne C.M. Staal, Nancy Baker, Lyle D. Burgoon, George Daston, Thomas B. Knudsen, Aldert H. Piersma. Developmental ontology: Computational modeling of Retinoic acid in Spina Bifida. SOT Baltimore MD, USA, 12-16 March 2017.
270. Myrto Dimopoulou, Aart Verhoef, Jeroen L.A. Pennings, Bennard van Ravenzwaay, Ivonne M.C.M. Rietjens and Aldert H. Piersma. A comparative transcriptomic approach for evaluating the mechanism of action of azoles in the rat Whole Embryo Culture. SOT Baltimore MD, USA, 12-16 March 2017.
271. Aldert H. Piersma. Validation redefined? Lecture at RIVM-BfR workshop on validation of alternative methods, Berlin, 23-24 March 2017.
272. Aldert H. Piersma. Gene expression to predict mode of action and developmental outcome. Lecture at HESI-DART Workshop: Rethinking developmental toxicity testing: Evolution or Revolution. Washington DC, 19-20 April 2017.
273. Aldert H. Piersma. Rat and Rabbit Developmental Toxicity Testing for Pharmaceuticals. A Database Analysis. Seminar, US FDA, College Park MD, 21 April 2017.
274. Aldert H. Piersma Redesigning the Embryofetal Developmental Toxicity Study: Revolution– Changing the Approach. Teratology Society 57th Annual Meeting, Denver CO, USA, 24-28 June 2017.
275. Aldert H. Piersma. Developmental Immunotoxicology. Invited lecture. SafeSciMet Course Berlin, 11 July 2017.
276. Knudsen TB, Hunter ES III, Baker NC, Spencer R, Glazier JA, Daston GP and Piersma AH. Mechanistic modeling of developmental defects through computational embryology. USEPA, ORD, RTP, NC; Leidos, RTP, NC, Indiana University, Bloomington IN, Procter & Gamble Co., RIVM, Netherlands. 10th World Congress: Alternatives and animal use in the life sciences, Seattle, WA, USA, 20-24 August 2017.
277. Tanja Burgdorf, Jan van Benthem, Janine Ezendam, Anne Kienhuis, Michael Oelgeschläger, Aldert Piersma, and Gilbert Schönfelder. Validation redefined? Validation and regulatory acceptance of alternative methods with an emphasis on test strategies – results of a joint workshop of BfR and RIVM. 10th World Congress: Alternatives and animal use in the life sciences, Seattle, WA, USA, 20-24 August 2017.
278. De Leeuw, Victoria C, Hessel, Ellen V, Piersma, Aldert H. Immunohistochemical characterization of biomarkers in the neural embryonic stem cell test (ESTn) and their perturbation by chemical exposures. 45th Annual European Teratology Society Meeting, Budapest, 11-14 September 2017. **Young Investigators Best Presentation Award.**
279. Aldert H. Piersma. Classification and Labelling of chemicals for Reproductive Toxicity in Europe, experiences and challenges. 45th Annual European Teratology Society Meeting, Budapest, 11-14 September 2017.
280. Piersma, Aldert H. Integrated approaches to testing and assessment (IATA) in developmental toxicology. Invited Lecture, 45th Annual European Teratology Society Meeting, Budapest, 11-14 September 2017.

281. Aldert H. Piersma. Endocrine Disruption and Thresholds of Adversity. Lecture CosmeticsEurope Meeting, Brussels, 26 October 2017.
282. Aldert H. Piersma. Omics, ontologies and computational approaches in innovative chemical hazard and risk assessment. Lecture CEFIC LRI workshop, Brussels, 16 November 2017.
283. Aldert H. Piersma. Animal-free approaches in developmental toxicology. Dutch Society of Toxicology, Section Reproductive Toxicology, Bilthoven, 21 November 2017.
284. Aldert H. Piersma Longterm pregnancy outcome: Identifying predictors of risk from non-clinical data. Scientific meeting on long-term pregnancy outcomes, EMA, London, 28-29 June 2018.
285. Erik Lebret (presenter), Aldert Piersma, Theo Vermeire, Danielle Timmermans. CAREFUL - CAusal REasoning For hUman health; paradigms, argumentation and perspectives from environmental epidemiology, toxicology and risk communication. Invited Lecture, ISEE-ISES Joint Annual Meeting, Ottawa, Canada, 26-30 August 2018.
286. Rob Jongeneel (presenter), Rik Bogers, Erik Lebret, Aldert Piersma, Danielle Timmermans, Theo Vermeire. CAREFUL - CAusal REasoning For hUman health in experimental toxicology and epidemiology; a joint case study on PFOA. Abstract, ISEE-ISES Joint Annual Meeting, Ottawa, Canada, 26-30 August 2018.
287. Yvonne C.M. Staal, Nancy C. Baker, Lyle D. Burgoon, George Daston, Thomas B. Knudsen, Aldert H. Piersma An AOP-based Ontology for Spina Bifida Caused by Disturbance in Retinoic Acid Signaling. Abstract, Eurotox Conference, Brussels, 2-5 September 2018.
288. Gina Mennen, Jeroen Pennings, Aldert Piersma. Neural crest related gene transcripts could serve as future targets for biomarker selection in the cardiac embryonic stem cell test. Abstract, Eurotox Conference, Brussels, 2-5 September 2018.
289. De Leeuw Victoria C, Hessel Ellen V, Piersma Aldert H. Assessment of the biological domain of the ESTn using two Valproic Acid isomers. Abstract, Eurotox Conference, Brussels, 2-5 September 2018.
290. Piersma AH. Building an AOP based prenatal developmental toxicity ontology. Invited Lecture, Eurotox Conference, Brussels, 2-5 September 2018.
291. Ellen V.S. Hessel, Yvonne C.M. Staal, Aldert H. Piersma. An ontology-driven animal-free testing strategy for developmental neurotoxicity testing. Abstract, Eurotox Conference, Brussels, 2-5 September 2018.
292. Styliani Fragki, Aldert H. Piersma, Emiel Rorije, Marco J. Zeilmaker. In vitro to in vivo extrapolation of effective concentrations in alternative assays for developmental toxicity testing: Application of generic PBK modelling. Abstract, Eurotox Conference, Brussels, 2-5 September 2018.
293. Aldert H. Piersma, Nancy C. Baker, Lyle D. Burgoon, George Daston, Thomas B. Knudsen, Yvonne C.M. Staal. An AOP-based Ontology for Spina Bifida Caused by Disturbance in Retinoic Acid Signaling. Abstract, European Teratology Society Annual Conference, Berlin, 10-13 September 2018.
294. Janine Ezendam, Tanja Burgdorf, Jan van Benthem, Anne Kienhuis, Michael Oelgeschläger, Aldert Piersma, and Gilbert Schönfelder. Validation and regulatory acceptance of innovative 3R approaches in regulatory toxicology – results of the second joint workshop of BfR and RIVM. ESTIV Conference, Berlin, 15-18 October 2018.

295. Aldert H. Piersma. Models, biomarkers and assays. Computational approaches to human developmental hazard and risk assessment of chemicals. Invited lecture, ESTIV Conference, Berlin, 15-18 October 2018.
296. Aldert H. Piersma. A roadmap for animal-free innovations in regulatory safety assessment. Keynote lecture, NC3R Workshop, London, UK, 10-11 December 2018.
297. Aldert H. Piersma. Evolution versus revolution towards animal-free safety testing in developmental toxicology. MHRA workshop - "Predicting Safety of Medicines in Pregnancy: a New Era?", London, UK, 17 January 2019.
298. Aldert H. Piersma¹, Nancy C. Baker², Lyle D. Burgoon³, George Daston⁴, Thomas B. Knudsen⁵, Yvonne C.M. Staal¹ An AOP-based Ontology for Spina Bifida Caused by Disturbance in Retinoic Acid Signaling. Abstract, SOT Annual Meeting, , Baltimore MD, USA, March 10-14, 2019.
299. Ellen V S Hessel and Aldert H Piersma, RIVM, Bilthoven, The Netherlands. Thyroid hormone perturbation and neurodevelopmental toxicity in animal studies. HESI-DART Thyroid Workshop, Washington DC USA, 9-10 May 2019.
300. Aldert H. Piersma. New approaches in developmental toxicity testing. Seminar, US EPA, Research Triangle park, Raleigh NC, USA, 14 May 2019.
301. Aldert H. Piersma, RIVM, Bilthoven, Netherlands Contemporary Reproductive and Developmental Toxicity Testing: New Approaches and Methodologies. Course Lecture, American College of Toxicology and Teratology Society. Gaithersburg MD, USA, May 17, 2019.
302. Victoria C. de Leeuw, Jeroen L.A. Pennings, Hennie M. Hodemakers, Paul F.K. Wackers, Conny T. van Oostrom, Ellen V.S. Hessel, Aldert H. Piersma. Using a cell lineage map to elucidate neurodevelopmental effects of two anti-depressants in the neural embryonic stem cell test. Dutch Society of Toxicology Annual Meeting, Ede, the Netherlands, 12-13 June 2019 and International Neurotoxicology Association meeting, September 29 – October 3, 2019, Düsseldorf, Germany .
303. Aldert H. Piersma and Ellen V. S. Hessel, RIVM, Bilthoven, The Netherlands. Thyroid hormone perturbation and neurodevelopmental toxicity in animal studies. Teratology Society 59th Annual Meeting, San Diego CA USA, June 22-26, 2019.
304. A. Piersma, Y. Staal, N. Baker, J. Pennings, G. Daston, T. Knudsen. Towards a mechanistic approach in toxicology: Retinoic acid balance disturbance leading to neural tube closure defects. EUROTOX conference, Helsinki, Finland, 8-11 September 2019.
305. Styliani Fragki, Aldert H. Piersma, Joost Westerhout, Anne Kienhuis, Nynke I. Kramer, Marco J. Zeilmaker. Are Generic PBK models the panacea for QIVIVE? EUROTOX conference, Helsinki, Finland, 8-11 September 2019.
306. Gina Mennen, Jeroen Pennings, Aldert Piersma. Gene network regulation by valproic acid analogues in the cardiac embryonic stem cell test. Abstract, Dutch Society of Toxicology Annual Meeting, Ede, the Netherlands, 12-13 June 2019; and European Teratology Society Annual Conference, Cologne, Germany, 17-20 September 2019.
307. Laura Samrani, Jeroen L.A. Pennings, Edwin P Zwart, Marc Pallardy, Helen Tinwell, Aldert H. Piersma. The retinoic acid pathway as a source of gene expression biomarkers of developmental toxicity in the zebrafish embryotoxicity assay. Abstract European Teratology Society Annual Conference, Cologne, Germany, 17-20 September 2019.

308. Aldert H. Piersma. Towards a mechanistic approach in toxicology – using AOP's in developmental toxicity assessment. Invited Lecture, European Teratology Society Annual Conference, Cologne, Germany, 17-20 September 2019.
309. Aldert Piersma, Ellen Hessel, Manon Beekhuijzen, Mira Wenker, Timo Hamers, Anita Boelen. A quantitative AOP for liver-mediated thyroid modulation after prenatal exposure in the rat. LRI Workshop, Brussels, Belgium, 20-21 November 2019.
310. Harm Heusinkveld, Yvonne Staal, Thomas Knudsen, George Daston, Aldert Piersma. A developmental ontology-based computational model for mammalian neural tube closure. CEFIC-LRI Workshop, Brussels, Belgium, 20-21 November 2019.
311. Harm Heusinkveld & Yvonne Staal RIVM, Richard Spencer & Thomas Knudsen USEPA, George Daston P&G, Aldert Piersma RIVM. A developmental ontology-based computational model for mammalian neural tube closure. Poster abstract, 59th SOT meeting, Anaheim CA USA, March 15-19 2020. (cancelled)
312. Victoria C. de Leeuw, Conny T.M. van Oostrom, Aldert H. Piersma, Harm Heusinkveld, Ellen V.S. Hessel. A robust protocol for the differentiation of stem cells to a neuronal-glial co-culture to assess developmental neurotoxicity. Poster abstract, 59th SOT meeting, Anaheim CA USA, March 15-19 2020. (cancelled)
313. Victoria C. de Leeuw, Marieke van Nieuwland, Aldert H. Piersma. Folic acid and methionine levels affect neural differentiation and compound toxic potency in the neural embryonic stem cell test (ESTn) Poster abstract, 59th SOT meeting, Anaheim CA USA, March 15-19 2020. (cancelled)
314. Aldert H. Piersma, Harm Heusinkveld, Yvonne Staal, George Daston, Richard Spencer, Thomas Knudsen. Development of a biology-driven computational model for vertebrate neural tube closure as a tool in chemical developmental toxicity assessment. DNT5 meeting, 5-8 April 2020, Konstanz, Germany. (cancelled)
315. Aldert H. Piersma. From evolution to revolution in human chemical safety assessment. Invited Lecture. Dutch Society of Toxicology Annual Meeting, 10-11 June 2020, Ede, Netherlands. (cancelled)
316. Aldert H. Piersma, Jan van Benthem, Janine Ezendam, Yvonne CM. Staal, Anne S. Kienhuis Setting the scene for a new paradigm for risk assessment: evolution versus revolution. WC11 Congress, 23-27 August 2020, Maastricht, Netherlands. (postponed 2021)
317. Aldert H. Piersma, Harm Heusinkveld, Yvonne Staal, George Daston, Richard Spencer, Thomas Knudsen. Virtual models for human developmental toxicology driven by new approach methodologies. Invited lecture, WC11 Congress, 23-27 August 2020, Maastricht, Netherlands. (postponed 2021)
318. Aldert H. Piersma, Mira Wenker, Anita Boelen, Timo Hamers, Ellen V. S. Hessel, Manon E.W. Beekhuijzen. Identifying human thyroid disruptors in the 21st century needs a real paradigm shift in risk assessment approaches. Invited lecture, WC11 Congress, 23-27 August 2020, Maastricht, Netherlands. (postponed 2021)
319. Piersma Aldert H, Heusinkveld Harm J, Hessel Ellen VS, Staal Yvonne CM. Alternative approaches in neurodevelopmental toxicity testing. Invited lecture. ETS Conference, 14-17 September 2020, Madrid, Spain. (cancelled)
320. Aldert H. Piersma. International Innovative Efforts for alternatives in understanding DART related Toxicities. DART-Alternatives Symposium. FDA Toxicology Seminar Series. Online Lecture, 21 October 2020.

321. Gina Mennen, Nina Hallmark, Marc Pallardy, Rémi Bars, Helen Tinwell, Aldert Piersma. Gene network regulations show different signatures for morpholines and piperidines in the ESTc. Abstract SOT virtual meeting, March 12-26, 2021.
322. Laura M.M. Samrani, Jeroen L.A. Pennings, Marc Pallardy, Helen Tinwell, Aldert H. Piersma Transcriptomic and morphological study of the impact of duration of exposure to all-trans retinoic acid on its metabolic pathway in the zebrafish embryotoxicity assay. Abstract SOT virtual meeting, March 12-26, 2021; and Eurotox Conference, Copenhagen, Denmark, 12-15 September 2021, online.
323. Victoria C. de Leeuw, Conny T.M. van Oostrom, Paul F.K. Wackers, Jeroen L.A. Pennings, Hennie M. Hodemaekers, Aldert H. Piersma, Ellen V.S. Hessel. RNA-seq reveals disturbance of key neurodevelopmental processes in the human neural progenitor test (hNPT) by diverse neurodevelopmental toxicants. Abstract SOT virtual meeting, March 12-26, 2021.
324. R. A. Currie, N. Principato, T. B. Knudsen, A. R. Kaczor, L. Yu, A. Letamendia, A. H. Piersma, and S. Mitchell-Ryan. Quantifying the DARTable Genome for Prediction of Teratogenic Doses - a case study using retinoic acid pathway-induced developmental toxicity. Abstract SOT virtual meeting, March 12-26, 2021.
325. Aldert H. Piersma. Contemporary Reproductive and Developmental Toxicity Testing: New Approaches and Methodologies. Lecture, ETS Course Reproductive and Developmental Toxicology, January 25-29, 2021, online.
326. Aldert H. Piersma, RIVM, Bilthoven, Netherlands Contemporary Reproductive and Developmental Toxicity Testing: New Approaches and Methodologies. Course Lecture, American College of Toxicology and Teratology Society. Gaithersburg MD, USA, May 21, 2021, online.
327. R.H. Mennen, V.C. de Leeuw, A.H. Piersma. The oxygen tension during embryonic stem cell culture (ESC) preceding differentiation influences chemical sensitivity in the embryonic stem cell test (EST). Eurotox Conference, Copenhagen, Denmark, 12-15 September 2021, online.
328. Styliani Fragki, Rudolf Hoogenveen, Conny van Oostrom, Paul Schwillens, Aldert H. Piersma, Marco J. Zeilmaker. The integration of in vitro chemical transplacental passage into a generic PBK model for pregnancy. Eurotox Conference, Copenhagen, Denmark, 12-15 September 2021, online.
329. Styliani Fragki, Deborah Rijkers, Aafke Janssen, Martijn Staats, Marco J. Zeilmaker, Aldert H. Piersma, Mirjam Luijten, Ron Hoogenboom, Ad Peijnenburg, Jochem Louisse. Study on the effects of 19 perfluoroalkyl substances on gene expression and biokinetics of PFOS and PFOA in human HepaRG liver cells. Eurotox Conference, Copenhagen, Denmark, 12-15 September 2021, online.
330. R.H. Mennen, M.M. Oldenburger, A.H. Piersma The cardiac embryonic stem cell test shows presence of biomarkers for endodermal, ectodermal, and neural differentiation. Poster presentation, WC11 Congress, 23 August – 2 September 2021, Maastricht, Netherlands, online.
331. Aldert H. Piersma Investigating liver-mediated thyroid modulation after prenatal exposure in the rat CEFIC-LRI Annual Meeting, Brussels, 8 November 2021.
332. Aldert H. Piersma Virtual Models for Human Developmental Toxicology driven by New Approach Methodologies, CEFIC-LRI Annual Meeting, Brussels, 8 November 2021.
333. Aldert H. Piersma, Harm Heusinkveld, Yvonne Staal, George Daston, Richard Spencer, Thomas Knudsen. Virtual models for human developmental toxicology driven by new

- approach methodologies. Invited lecture, 6th world congress of the Tissue Engineering and Regenerative Medicine International Society (TERMIS 2021), 15 November 2021.
334. Aldert H. Piersma. Investigating liver-mediated thyroid modulation after prenatal exposure in the rat. Swisstox Symposium, Basel, 18 November 2021, online.
335. Aldert H. Piersma. Investigating liver-mediated thyroid modulation after prenatal exposure in the rat. 12th International Akademie Fresenius Conference, 23 November 2021, online.
336. Aldert H. Piersma. Investigating liver-mediated thyroid modulation after prenatal exposure in the rat. Thyroid BASF Symposium, 9 December 2021, online.
337. A. Piersma, M. Beekhuijzen, A. Boelen, S. Bressers, E. Gremmer, M. de Groot, T. Hamers, E. Hessel, K. van Dycke, and M. Wenker. Developing a quantitative AOP for liver-mediated thyroid modulation after prenatal exposure to a xenobiotic compound in the rat. SOT, 27-31 March 2022, San Diego CA, USA.
338. Jochem Louisse, Styliani Fragki, Deborah Rijkers, Aafke Janssen, Martijn Staats, Marco Zeilmaker, Aldert Piersma, Mirjam Luijten, Ron Hoogenboom, Ad Peijnenburg. In vitro liver toxicity and biokinetics of perfluoroalkyl substances in human HepaRG liver cells. SOT, 27-31 March 2022, San Diego CA, USA.
339. Aldert H. Piersma. Way forward and future perspectives for NAMs. ONTOX webinar, 10 June 2022.
340. A. Piersma, M. Beekhuijzen, A. Boelen, S. Bressers, E. Gremmer, M. de Groot, T. Hamers, E. Hessel, K. van Dycke, and M. Wenker. Developing a quantitative AOP for liver-mediated thyroid modulation after prenatal exposure to a xenobiotic compound in the rat. ICCA-LRI meeting, 20-21 June 2022, Yokohama, Japan (online); and EFSAONE Conference, 21-24 June 2022, Brussels, Belgium.
341. Marlon R. Schneider, Michael Oelgeschlaeger, Tanja Burgdorf, Peter van Meer, Peter Theunissen, Anne S. Kienhuis, Aldert H. Piersma, Rob J. Vandebriel. Applicability of organ-on-chip systems in toxicology and pharmacology. EUROoCS Conference, 4-5 July 2022, Grenoble, France.
342. Aldert H. Piersma, Manon Beekhuijzen, Anita Boelen, Steffi Bressers, Eric Gremmer, Martje de Groot, Timo Hamers, Ellen Hessel, Kirsten Van Dycke, Mira Wenker. Developing a quantitative AOP for liver-mediated thyroid modulation after prenatal exposure to a xenobiotic compound in the rat. ICCA-LRI & NITE Workshop, 20-21 June, Yokohama, Japan; and ICT-IUTOX Conference 18-22 September 2022, Maastricht, Netherlands, and European Teratology Society, 25-28 September, Antwerp, Belgium.
343. Meerman JJ, Piersma A.H., Legler J., Westerink R.H.S., Heusinkveld H.J. Life Course Pesticide Exposure and Parkinson's Disease: Innovative Animal-Free Assessment of Chemical Effects on Neurodegeneration. ICT-IUTOX Conference, 18-22 September 2022, Maastricht, Netherlands.
344. Job Berkhout, Aldert Piersma, Harm Heusinkveld. Computational modelling of neural tube closure defects. ICT-IUTOX Conference, 18-22 September 2022, Maastricht, Netherlands. **ECETOC Christa Hennes Best Poster Award**. ESTIV conference, 21-25 november 2022. Sitges, Spain. **Best poster award**.
345. Dierichs N.T.O.M., Piersma A.H., van Oostrom C.T.M., de Leeuw V.C., Visser W.E., Peeters R.P., Hessel E.V.S. The Virtual Human Platform for Safety Assessment: Innovative animal-free assessment of thyroid-mediated developmental neurotoxicity. ICT-IUTOX Conference, 18-22 September 2022, Maastricht, Netherlands.

346. Bernard Staumont, Luiz Carlos Maia Ladeira, Alessio Gamba, Raphaëlle Lesage, Anouk Verhoeven, Jian Jiang, Jonas van Ertvelde, Devon A. Barnes, Manoe J. Janssen, Eliska Kuchovska, Job Berkhout, Daniël Roodzant, Marc Teunis, Thomas Bozada Jr, Thomas H Luechtefeld, Ramiro Jover, Inger-Lise Steffensen, Graciela Lopez Soop, Tim Hofer, Oddvar Myhre, Hubert Dirven, Tamara Vanhaecke, Mathieu Vinken, Rosalinde Masereeuw, Ellen Fritsche, Aldert Piersma, Harm J. Heusinkveld, Liesbet Geris. Physiological maps: a benchmark tool for adverse outcome pathways and a cornerstone for the development of disease ontologies. ICT-IUTOX Conference, 18-22 September 2022, Maastricht, Netherlands.
347. Job H. Berkhout^{1,2}, Aldert Piersma^{1,2}, Juliette Legler², Alessio Gamba³, Luiz Carlos Maia Ladeira³, Bernard Staumont³, Raphaëlle Lesage⁴, Liesbet Geris^{3,4,5}, Thomas B. Knudsen⁶, Richard M. Spencer⁶, Harm J. Heusinkveld¹ Computational modelling of neural tube closure defects. SOT 2023 Nashville USA, abstract.
348. Piersma AH. Reproductive Toxicology and the Road to Animal-free Human Hazard and Risk Assessment. ECHA-NAM Workshop, 31 May-1 June 2023, Helsinki, Finland.
349. Piersma AH. The application of embryonic stem cell test systems in developmental toxicology. ScChemRisc symposium, online lecture, 2 June 2023, Japan.
350. Dierichs N.T.O.M., Meima M.E., Visser W.E., Piersma A.H., Hessel E.V.S., Peeters R.P. Developing an animal-free testing battery for thyroid hormone related developmental neurotoxicity. Poster presentation, Internal Medicine Science days, Rotterdam, 29 June 2023.
351. Dierichs N.T.O.M., Meima M.E., Visser W.E., Piersma A.H., Hessel E.V.S. Peeters R.P. Developing an animal-free testing battery for thyroid hormone mediated developmental neurotoxicity. 45th Annual Meeting of the European Thyroid Association, 9-12 September 2023, Milan, Italy.
352. Meerman JJ, Legler J, Piersma A.H., Westerink R.H.S., Heusinkveld H.J. Building an Excess Calcium-centric Adverse Outcome Pathway for Parkinsonian Motor Symptoms EUROTOX 10-13 Sept 2023, Ljubljana, Slovenia.
353. Piersma AH. Setting the scene: what are ontologies and how can they be used in toxicology? Invited lecture, EUROTOX 10-13 Sept 2023, Ljubljana, Slovenia.
354. Piersma AH. The road to a human-based animal-free safety assessment strategy based on in vitro and in silico approaches. Invited lecture, EUROTOX 10-13 Sept 2023, Ljubljana, Slovenia.
355. Piersma AH. Development of New Approach Methodologies for animal-free human hazard and risk assessment. Invited Lecture, ETS 17-20 September 2023, Madrid, Spain.
356. Laura Guzman, Miren Ettcheto, Britta A. Kühne, Saskia Galanjuk, Javier Gonzalez-Linares, Raul Lopez-Arnau, Elisabet Teixidó, Victoria C. De Leeuw, Ellen Fritsche, Alder H. Piersma, Marta Barenys. Evaluation of Triclabendazole sulfoxide developmental toxicity in a multi-species approach. Abstract, ETS 17-20 September 2023, Madrid, Spain.
