

Curriculum Vitae

Personal information Heidi Foth

Work experience

1. Employer: University of Mainz
 - Start date: 071981
 - End date: 061985
 - Position: Research fellow
 - Activities: work of Dissertation (benzo(a)pyrene metabolism in rat lung and liver) tutorial work with students
 - Country: Germany
2. Employer: University of Goettingen
 - Start date: 071985
 - End date: 121991
 - Position: senior scientist
 - Activities: work on grand thesis (Habilitation) xenobiotic metabolism in lung teaching of students in pharmacology
 - Country: Germany
3. Employer: University of Goettingen
 - Start date: 011992
 - End date: 091995
 - Position: Associate Professor
 - Activities: Leader of Research laboratory, Tutor for Research fellows Teaching (Pharmacology) for Students of medicine
 - Country: Germany
4. Employer: University of Halle Wittenberg
 - Start date: 101995
 - End date: 102021
 - Position: Director of Institute
 - Activities: Research on lung cell models teaching in pharmacology and toxicology Environmental Toxicology committee work in environmental toxicology
 - Country: Germany

Education and training

1. Subject: University of Mainz
 - Start date: 031976
 - End date: 061981
 - Qualification: Dental Medicine
 - Organisation: Staatsexamen Zahnmedizin (Exam of the State Dental Medicine) Approbation Dental Medicine
 - Country: Germany
2. Subject: German Society of Experimental and Clinical Pharmacology and Toxicology
 - Start date: 071981
 - End date: 031986
 - Qualification: Fachtoxikologe DGPT
 - Organisation: German Certified Expert in Toxicology (DGPT) European Registered Expert in Toxicology ERT (1998)
 - Country: Germany

Additional information

Publications

Publications 1. Klaus E, Foth H, Kahl R, Kahl GF (1982) Similar level of metabolic activation of benzo(a)pyrene in perfused rat lung and liver and protection of lung by liver in a combined perfusion system. Biochem Biophys. Res Commun 105, 596–602 2. Foth H, Molliere M, Kahl R, Jähnchen E, Kahl GF (1984) Covalent binding of benzo(a)pyrene in perfused rat lung following systemic and intratracheal administration. Drug Metabolism and Disposition Vol 12, (6): 760–766 3. Kahl GF, Molliere M, Philipp P, Kahl R, Foth H (1984) Activating and detoxifying metabolism of benzo(a)pyrene in the isolated perfused rat lung:in Problems of inhalatory toxicity studies (P Grossdanoff, R Bass, U Hackenberg, D Henschler Hj Klimsch Eds) BGA Schriften5, 343–357 4. Michaelis HC, Foth H, Kahl GF (1987) Determination of 5-fluoro-2'-deoxyuridine in human plasma by high performance liquid chromatography with pre column fluorimetric derivatization. J Chromatogr 416, 176–182 5. Molliere M, Foth H, Kahl R, Kahl GF (1987) Comparison of benzo(a)pyrene metabolism in isolated perfused rat lung and liver. Arch Tox 60, 270–277 6. Rüdell U, Foth H, Kahl GF (1987) Eightfold induction of nicotine elimination in perfused rat liver by pretreatment with phenobarbital. Biochem Biophys res Commun 148, 192–198 7. Foth H, Kahl R, Kahl GF (1988) Pharmacokinetics of low dose of benzo(a)pyrene in the rat. Food Chem Toxicol 26, 45–51 8. Foth H, Rüdell U, Ritter G, Kahl GF (1988) Inhibitory effect of nicotine on benzo(a)pyrene elimination and marked pulmonary metabolism of nicotine in isolated perfused rat lung. Klin Wschr 66, Supl XI, 98–104 9. Michaelis HC, Geng W, Kahl GF, Foth H (1990) Sensitive determination of bupivacaine in human plasma by high performance liquid chromatography. J. Chromatogr. 527, 201–207 10. Foth H, Kunellis E, Müseler T, Kahl GF (1990) Nonlinear elimination kinetics of 5-fluoro-2'-deoxyuridine in isolated perfused rat liver and hepatocytes. J Pharmacol Exp Ther 254, 427–432 11. Foth H, Hellkamp J, Kunellis E, Kahl GF (1990) pulmonary elimination and metabolism of 5-fluoro-2'-deoxyuridine in isolated perfused rat lung and liver and lung slices. Drug Metab Disp 18, 1011–1017 12. Foth H, Rauschecker H, Willenbrock C, Michaelis HC, Horst F, Voth E, Musch E, Loos U, Kahl GF (1990) Comparison of leakage measurement using 99mTc-labeled red blood cells and peripheral melphalan determination in hyperthermic isolation perfusion of the extremities. In: Progress in Regional Cancer Therapy (R Jakesz, H. Rainer Eds) Springer Heidelberg 266–261 13.

Foth H, Walther UJ, Kahl GF (1990) Increased hepatic nicotine elimination after phenobarbital induction in the conscious rat. *Toxicol Appl Pharmacol* 105, 382–392 14. Foth H, Kunellis E_M, Müseler T, Kahl, GF (1990) Nonlinear elimination kinetics of 5_fluoro_2'_deoxyuridine in isolated perfused rat liver and isolated hepatocytes. *Journal of Pharmacology and Experimental Therapeutics* Vol 254, (2): 427–432 15. Foth H, Hellkamp J, Kunellis E._M., Kahl GF (1990) Pulmonary elimination and metabolism of 5_fluoro_2'_deoxyuridine in isolated perfused rat lung and lung slices. *Drug Metabolism and Disposition* Vol 18, (6): 1011–1017 16. Foth H Walter UI, Looschen H, Kahl GF (1990) Extrahpatic compared with hepatic metabolism of nicotine in the rat. In: Effects of nicotine on biological systems (Adlkofer F, Thurau K Eds) Advances in Pharmacological Sciences, Birkhäuser, Basel, Boston, Berlin 83_87 17.

Frijus_Plessen N, Michaelis HC, Foth H, Kahl GF (1990) Determination of 3'_azido_3'_deoxythymidine, 2',3'_dideoxycytidine, 3'_fluoro_3'_deoxythymidine and 2',3' dideoxyinosine in biological asamples by high performance liquid chromatography. *J. Chromatogr* 534, 101–107 18. Schächer M, Foth H, Schlüter H, Kahl R (1991) Oxidation of Tris to one carbon compounds in radical_rpduring model system, in microsomes, in hepatocytes and in rats. *Free Radical Res Commun* 11, 339–347 19. Foth H, Looschen H, Neurath H, Kahl GF (1991) Nicotine metabolism in isolated perfused lung and liver in phenobarbital_ and benzoflavone_treated rats. *Arch Toxicol* 65: 68–72 20. Rauschecker HF, Foth H, Michaelis HC, Horst F, Gatzemeier W, Willenbrock C, Voth E, Kahl GF (1991) Kinetics of melphalan leakage during hyperthermic isolation perfusion in melanoma of the lim. *Cancer Chemotherapy Pharmacol* 27, 379–384 21. Foth H, Aubrecht J, Höhne M, Walther UI, Kahl GF (1992) Increased cotinine elimination and cotinine_N_oxide formation by phenobarbital induction in rat and mouse. *Clin Invest* 70, 175–181 22. Foth H, Geng WP, Krug N, Vetterlein F (1995) Pulmonary uptake of bupivacaine in isolated perfused rat lung. *Naunyn_Schmiedeberg's Arch Pharmacol* 351: 99–106 23. Foth H (1995) Role of the lung in accumulation and metabolism of xenobiotic compoundsimplications for chemically induced toxicity *Crit Rev Toxicol*. 1995, 25(2):165–205. 24. Geng WP, Ebke M, Foth H (1995) Prilocaine elimination by isolated perfused rat lung and liver. *Naunyn_Schmiedeberg's Arch Pharmacol* 351: 93–98 25. Kietzmann D, Foth H, Geng W P, Rathgeber J, Gundert_Remy U, Kettler D (1995) Transpulmonary disposition of prilocaine, mepivacaine and bupivacaine in humans in the course of epidural anaesthesia. *Acta Anaesthesiol Scand* 39: 885–890 26. Hirsch_Ernst K, Zieman Ch, Schmitz_Salue Ch, Foth H, Kahl GF (1995) Modulation of P_Glycoprotein and mdrlbmRNA Expression by growth factors in primary rat hepatocyte culture. *Biochem Biophys Research Comm* 1, Vol 215, 179–185 27. Foth H, Schröder B, Kraus JP, Hering FB, Ensink M, Hellige G (1996) Myocardial extraction of bupivacaine in anaesthetized sheep and by hearts of sheep and rats in vitro. *British J Anaesthesia* 77: 257–264 28. Schrader E, Hirsch_Ernst KI, Scholz ER, Richter E, Kahl GF, Foth H (1997) Xenobiotic metabolism in lung and content of cytochrome P 450 2B1 in alveolar type II cells. *FASEB J*, 11: A185 29. Schrader E, Richter E, Schulze J, Hirsch_Ernst KI, Kahl GF, Foth H (1997) Metabolism of NNK, a tobacco specific nitrosamine, in isolated rat lung and liver. *N_S ARCH PHARMACOL*, 355: Suppl, R 136 30. Ziemann C, Hirsch_Ernst KI, Foth H, Kahl GF (1997) Modulation of P_glycoprotein expression and mdrl transport activity by reactive oxygen species in primary rat hepatocyte cultures. *N_S ARCH PHARMACOL*, 355: Suppl, R 143 31. Bock KW, Degen GH, Foth H, Kahl R, Kappus H, Neumann HG, Oesch F, Schulte_Hermann R (1998) Ozone_position of the Advisory Commission of the Toxicology Section of the German Society for Experimental and Clinical Pharmacology. *Pneumologie* 1998 Jun., 52: 358–365 32. Hirsch_Ernst KI, Ziemann C, Foth H, Kozián D, Schmitz_Salue C, Kahl GF (1998) Induction of mdrlbmRNA and P_glycoprotein expression by tumor necrosis factor alpha in primary rat hepatocyte cultures. *J CELL PHYSIOL*, 176: 506–515 33. Hüttner E, Nikolova T, Foth H (1998) Genotoxic effects in humans after an accidental vinyl chloride exposure. *N_S ARCH PHARMACOL*, 357: suppl, R 141 34. Lichtblau C, Montag C, Müller A, Stamm A, Steinwachs MR, Foth H (1998) Zelluläre Kinetik von 5_Fluor_2'_desoxouridin und Azidothymidin in Hepatozyten und Tumorzellen. *Z GASTROENTEROL*, 36: 67–35. Schrader E, Hirsch_Ernst KI, Kahl GF, Foth H (1998) CYP2BI expression and metabolic activation of 4_(methylnitrosamino)_1_(pyridyl)_1_butanone in lung and alveolar type II cells. 12 th International Symposium on Microsomes and Drug Oxidations, Montpellier, France, July 20–24 1998, Montpellier France: A345 36. Schrader E, Hirsch_Ernst KI, Richter E, Foth H (1998) Hepatischer Metabolismus von 4_(Methylnitrosamino)_1_(3_pyridyl)_1_butanon(NNK). *Z GASTROENTEROL*, 36: 73–37. Schrader E, Hirsch_Ernst K, Richter E, Foth H (1998) Metabolism of 4_(methyl_nitrosamino)_1_(3_pyridyl)_1_butanone (NNK) in isolated rat lung and liver. *N_S ARCH PHARMACOL*, 357: 336–343 38. Schrader E, Röhrdanz E, Hirsch_Ernst KI, Kahl R, Kahl GF, Foth H (1998) Alteration in expression of xenobiotic metabolizing enzymes and of catalase during primary rat alveolar type II cell culture. *N_S ARCH PHARMACOL*, 357: Suppl, R 135 39. Schrader E, Stock TW, Hirsch KI, Foth H (1998) Short_term culture of rat alveolar type II (AI) cells_a useful model for metabolic investigations on chemically induced carcinogenesis in the lung. *N_S ARCH PHARMACOL*, 358: Suppl, R 536 40. Schulze J, Schrader E, Foth H, Kahl GF, Richter E (1998) Effect of nicotine or cotinine on metabolism of 4_methylnitrosamino_1_(3_pyridyl)_1_butanone (NNK) in isolated rat lung and liver. *N_S ARCH PHARMACOL*, 357: 344–350 41. Wolff I, Bauer S, Schmidt R, Foth H (1998) Toxicological characterization of complex mixtures. *N_S ARCH PHARMACOL*, 357: Suppl, R 125 42. Ziemann C, Foth H, Kahl GF, Hirsch_Ernst KI (1998) Modulation der mdrlbmRNA Expression durch reaktive Sauerstoffspezies und durch den Cyclooxygenase_2 Inhibitor NS 398 in Primärkulturen von Rattenhepatozyten. *Z GASTROENTEROL*, 36: 57–43. Becker R, Hüttner E, Nikolova T, Wolff I, Foth H (1999) Cytogenetic monitoring of a human population after an accidental vinyl chloride exposure. Schriftenreihe der deutschen Geologischen Gesellschaft, 9: 12–44. Foth H (1999) Speichelsekretion und Arzeneimittel beim alten Menschen. *ZAHNÄRZTL MITT*, 22: 50–56 45. Foth H (1999) Krankmachende Umwelt. *SCIENTIA HALENSIS*, 99: 18–19 46. Foth H, Schrader E, Rachidi A, Stock TW, Hirsch_Ernst KI, Kahl GF (1999) Isolated perfused lung and primary culture of lung cells are useful models in investigation of lung_specific drug metabolism. *Therapeutic Drug Monitoring*, 21: No.4 47. Foth H, Schrader E, Rachidi A, Stock TW, Hirsch_Ernst KI, Kahl GF (1999) Expression of cytochrome P_450 enzymes in human bronchial epithelium and primary cultures of rat lung cells. *TOXICOL LETT*, 109: Suppl 1, 47–48. Runge DM, Runge D, Foth H, Strom SC, Michalopoulos GK (1999) STAT 1alpha/1B STAT 3 and STAT 5: expression and association with c_MET and EGF_receptor in long_term cultures of human hepatocytes. *BIOCHEM BIOPH RES CO*, 265: 376–381 49. Runge DM, Runge D, Foth H, Strom SC, Michalopoulos GK (1999) STAT1a/b, STAT3 and STAT5: association with c_MET and EGF_receptor, activation and dimerization in long_term cultures of human hepatocytes. *BIOCHEM BIOPH RES CO*, 265: 376–381 50. Schrader E, Hirsch_Ernst KI, Kahl GF, Foth H (1999) Metabolism of 4_(methyl_nitrosamino)_1_(3_pyridyl)_1_butanone (NNK) in primary cultured rat alveolar type II cells. *N_S ARCH PHARMACOL*, 359: Suppl, R 611 51. Schrader E, Klaunick G, Jorritsma U, Neurath H, Hirsch_Ernst KI, Kahl GF, Foth H (1999) High_performance liquid chromatographic method for simultaneous determination of (1_methyl_14 C) caffeine and its eight major metabolites in rat urine. *J of Chromatography*, 726: 195–201 52. Stock TW, Müller P, Wolff I, Bahn H, Foth H (1999) Normal Human Bronchial epithelial cells as a tool to monitor genotoxic effects of complex mixtures. *N_S ARCH PHARMACOL*, 359: Suppl, R 693 53. Wolff I, Bauer S, Müller P, Stock TW, Pepling M, Foth H (1999) Toxicological characterization of complex mixtures from plasma etching processes. Schriftenreihe der deutschen Geologischen Gesellschaft, 9: 155–154. Wolff I, Müller P, Stock TW, Bauer S, Foth H (1999) Genotoxic activity of complex mixtures in solid waste from plasma etching in lymphocytes bronchial cells and hepatocytes. *TOXICOL LETT*, 109: Supp 1, 47–55. Wolff I, Müller P, Stock TW, Bauer S, Foth H (1999) Generation of DNA single_strand breaks by complex mixtures. *N_S ARCH PHARMACOL*, 359: Suppl, R 666 56. Jorritsma U, Schrader E, Klaunick G, Kapitulnik J, Hirsch_Ernst KI, Kahl GF, Foth H (2000) Monitoring of cytochrome P_450 1A acitivity by determination of the urinary pattern of caffeine metabolites in wistar and hyperbilirubinemic Gunn rats. *TOXICOLOGY*, 144: 229–236 57. Köhler C, Runge DM, Foth H, Fleig WE, Strom SC, Michalopoulos GK, Runge D (2000) P_Glycoprotein and MRP (Multidrug Resistance_associated Protein) Expression in serumfreien Langzeitkulturen humamer Hepatozyten. *Z GASTROENTEROL*, 38: 104–108. Köhler C, Runge DM, Foth H, May U, Fleig WE, Strom SC, Michalopoulos GK, Runge D (2000) Regulation of P_Glycoprotein and MRP (multidrug resistance_associated protein) by cytochrome P450 inducers in serum_free cultures of human hepatocytes. Falk Worshop 27.–28.01 in Köln, 2: 1–59. Köhler C, Weidauer E, Runge DM, Lehmann T, Röhrdanz E, Tran Thi QH, Kahl R, Foth H (2000) Oxidative stress alters expression of P_glycoprotein and multidrug resistance_associated protein, but not antioxidant enzymes in lung tumor cell lines. *N_S ARCH PHARMACOL*, 361: Suppl, R 163 60. Lehmann T, Köhler C, Runge DM, Foth H (2000) Expression of multidrug resistance proteins and CYP2E1 in serum_free cultured human bronchial epithelial cells. *TOXICOL LETT*, 116: (Suppl.1), 47(175) 61. Lehmann T, Weidauer E, Röhrdanz E, Tran Thi QH, Kahl R, Foth H (2000) Influence of paraquat and hydrogen peroxide to antioxidant enzymes (cat, MNSOD) and mdrlbm in rat alveolar type II pneumocytes. *N_S ARCH PHARMACOL*, 361: Suppl, R 142 62. Müller P, Wolff I, Bauer S, Stock TW, Foth H (2000) Assessment of DNA damage induced by complex mixtures of halogenated hydrocarbons using the alkaline comet assay. *TOXICOL LETT*, 116: (Suppl.1), 36(136) 63. Mueller SP, Krivokuća M, Rohrbach S, Darmer D, Foth H, Holtz J (2000) Age_specific myocardial decompensation under chronic NO_synthase expression in rats is prevented by application of insulin_like

growth factor_1. CIRCULATION, 102: 134 64. Runge DM, Runge D, Foth H, Strom SC, Michalopoulos GK (2000) EGF_receptors and MET: Cross_talk between the two growth factor receptors mediated by STAT_proteins in human hepatocytes. Falk Worshop 27_28.01 in Köln, 3: 1 65. Runge DM, Runge D, Foth H, Strom SC, Michalopoulos GK (2000) EGF_Rezeptor und MET: Cross_talk der Rezeptoren vermittelt durch STAT_Proteine. Z GASTROENTEROL, 38: 95 66. Runge DM, Runge D, Foth H, Strom SC, Michalopoulos GK (2000) Activation of STAT proteins by HGF and EGF in human hepatocytes. J HEPATOL, 32: Suppl, 2 67. Runge DM, Runge D, Foth H, Strom SC, Michalopoulos GK (2000) EGF_Rezeptor und MET: cross_talk between the two growth factor receptors mediated by STAT proteins in human hepatocytes. FASEB J, 14: A 722 68. Runge DM, Runge D, Hofmann S, Decker C, Silber RE, Foth H (2000) Activation of acute phase response by Ethanol but not Dichloromethane in primary cultures of human bronchial epithelial cells. TOXICOL LETT, 116: (Suppl.1), 46(170) 69. Runge DM, Stock TW, Beer Stoltz D, Taeger C, Runge D, Hofmann S, Silber RE, Holzhausen HJ, Foth H (2000) Acute phase response and activation of hepatocyte growth factor after ethanol and dichlormethane treatment of normal human bronchial epithelial cells in culture. N_S ARCH PHARMACOL, 361: Suppl, R 161 70. Runge D, Runge DM, Köhler C, Lehmann T, Jäger D, May U, Foth H, Dörk H, Strom SC, Michalopoulos GK, Fleig WE (2000) Expression of membrane transporter and cytochrome P450 proteins in serum_free long_term human hepatocyte cultures. FASEB J, 14: A 183 71. Schrader E, Hirsch_Ernst KI, Scholz E, Kahl GF, Foth H (2000) Metabolism of 4_(methylnitrosamino)_1_(3_pyridyl)_1_butane (NNK) in primary cultured rat alveolar type II cells. DRUG METAB DISPOS, 28: 180_185 72. Schrader E, Hirsch_Ernst KI, Scholz E, Kahl GF, Foth H (2000) Metabolism of 4_(MethylNitrosamino)_1_(3_pyridyl)_1_butane (NNK) in primary cultures of rat alveolar type II cells. DRUG METAB DISPOS, 28: 180_185 73. Wolff I, Becker R, Hüttner E, Nikolova T, Foth H (2000) Cytogenetic monitoring of a human population after an accidental vinyl chloride exposure. N_S ARCH PHARMACOL, 361: Suppl, R 176 74. Becker R, Nikolova T, Wolff I, Lovell D, Hüttner E, Foth H (2001) Frequency of HPRT mutants in humans exposed to vinyl chloride via an environmental accident. MUTAT RES, 494: 87_96 75. Becker R, Nikolova T, Wolff I, Lovell D, Hüttner E, Foth H (2001) Frequency of HPRT mutants in humans exposed to vinyl chloride via environmental accident. MUTAT RES GEN TOX EN, 494: 87_96 76. Foth H (2001) Toxisches Potential von Praxischemikalien. DTSCH ZAHNÄRZTEKALENDER, 1: 21_30 77. Helle S, Kahl R, Schrenk D, Foth H (2001) DGPT Information Network Toxicology (INT). N_S ARCH PHARMACOL, 363: Suppl, R 173 78. Lehmann T, Köhler C, Stehfest E, Stock T, Foth H (2001) Expression of MRP1 in human lung cells and effect of promotores of oxygen radicals. TOXICOL LETT, 123: (Suppl.1) 130(481) 79. Lehmann T, Köhler C, Weidauer E, Foth H (2001) Expression of multidrug_resistance (MRP) associated protein in normal human lung. N_S ARCH PHARMACOL, 363: Suppl, R 161 80. Lehmann T, Kohler C, Weidauer E, Taeger C, Foth H (2001) Expression of MRP1 and related transporters in human lung cells in culture. TOXICOLOGY, 167: 59_72. 81. Müller P, Wolff I, Bauer S, Stock TW, Foth H (2001) Increased rates of micronuclei in cultured human lymphocytes following the treatment with a complex mixture of perhalogenated hydrocarbons. N_S ARCH PHARMACOL, 363: Suppl, R 149 82. Müller SP, Brömmel HJ, Rothe M, Foth H, Holtz J (2001) Tissue distribution of coenzyme Q10 in senescent rats after subcutaneous application of nanodispersed Q10. N_S ARCH PHARMACOL, 363: Suppl, R 162 83. Müller SP, Brömmel HJ, Rothe M, Foth H, Holtz J (2001) Gewebegehalt von Coenzym Q10 in alternden Ratten nach subcutaner Applikation einer Q10 Nanodispersion. N_S ARCH PHARMACOL, 4: 363 84. Rennicke A, Lehmann T, Müller SP, Foth H (2001) Expression of multidrug_resistance transporters in hepatocytes and lung cells treated with Ubiquinone (CoQ10) nanodispersion and hydrogen peroxide. N_S ARCH PHARMACOL, 363: Suppl, R 161 85. Runge DM, Stock TW, Lehmann T, Taeger C, Bernauer Ü, Beer Stoltz D, Hofmann S, Foth H (2001) Expression of Cytochrome P_450 2E1 in normal bronchial epithelial cells and activation by ethanol in culture. ARCH TOXICOL, 75: 335_345 86. Stock TW, Müller P, Lehmann T, Hofmann SH, Foth H, Silber RE (2001) Acitivity, morphology and utility of primary normal human bronchial epithelial cells cultured from resection material. THORAC CARDIOV SURG, 2001: FP12 87. Weidauer E, Mörke H, Foth H, Brömmel HJ (2001) Transition metals are not necessary for the anaerobic formation of hydroxyl radicals by paraquat monocation and hydrogen peroxide. TOXICOL LETT, 123: 139 88. Weidauer E, Roehrdanz E, Foth H (2001) Comparison of lung cells with respect to antioxidative enzymes after paraquat and hydrogen peroxidine. TOXICOL LETT, 123: (Suppl.1) 138(511) 89. Foth H, Lehmann T, Stehfest E, Taeger C, Hammer A, Hofmann S (2002) Stability of MRP and LRP expression in human lung cells in culture. TOXICOL LETT, 135: Suppl.1, 27 90. Jäger D, Holtz J, Redpath NT, Müller SP, Pönicker K, Heinroth_Hoffmann I, Werdan K, Müller_Werdan U (2002) The ageing heart: influence of cellular and tissue ageing on total content and distribution of the variants of elongation factor_2. MECH AGEING DEV, 123: 1305 _ 1319. 91. Kuhlmann O, Hofmann S, Müller SP, Weiss M (2002) Effect of rutin and cinchonine on the pharmacokinetics of idarubicin in the isolated perfused rat lung. EUR J PHARM SCI, 17: 66 92. Lehmann T, Szehfest E, Taeger C, Hammer A, Hofmann S, Foth H (2002) Variation of Individual Expression of MRP and LRP in Primary Human Lung Cells in Culture. N_S ARCH PHARMACOL, 365: Suppl, R150 93. Müller P, Wolff I, Stock TW, Bauer S, Foth H (2002) Screening toward Genotoxic Effects of Halogenated Hydrocarbons. N_S ARCH PHARMACOL, 365: Suppl, R137 94. Müller SP, Holtz J, Foth H (2002) Effects of coenzyme Q10 on pulmonary function _ A study with an isolated rat lung perfusions model. N_S ARCH PHARMACOL, 365: 515 95. Stehfest E, Lehmann T, Köhler C, Foth H (2002) Expression and Modulation of/by Glutathione in Human Lung Cells. N_S ARCH PHARMACOL, 365: Suppl, R150 96. Stehfest E, Torky A, Lehmann T, Foth H (2002) MRP expression and modulation of/by Glutathione in human lung cells. TOXICOL LETT, 135: Suppl.1, 273 97. Torky AW, Köhler C, Olausson B, Foth H (2002) A Non_Invasive Fluorescence Assay for Uptake and Efflux of MDR and MRP Substrates. N_S ARCH PHARMACOL, 365: Suppl, R151 98. Weidauer E, Mörke W, Foth H, Brömmel HJ (2002) Does the anaerobic formation of hydroxyl radicals by paraquat monocation radicals and hydrogen peroxide require the presence of transition metals? ARCH TOXICOL, 76: 89_95 99. Kahl R, Degen G, Foth H, Kramer PJ, Lilienblum W, Schrenk D, Schulz T, Schweinfurth H (2003) Comments from the advisory commission for toxicology section of the German association for experimental and clinical pharmacology and toxicology (DGPT) on the possible health dangers of di(2_ethylhexyl)phthalate (DEHP) from medical products in neonatal intensive care units. Umweltmedizin in Forschung und Praxis, 8: 25_30 100. Bolt HM, Foth H, Hengstler JG, Degen GH (2004) Carcinogenicity categorization of chemicals_new aspects to be considered in a European perspective. TOXICOL LETT, 151: 29_41 101. Foth H (2004) Editorial. TOXICOLOGY, 205: 141_2 102. Lerche I, Foth H (2004) Quantitative risks of death and sickness from toxic contamination. Environmental Geosciences, 11: 143_167 103. Lerche I, Foth H (2004) Quantitative risks of death and sickness from toxic contamination II. Age_dependent toxic sickness and death exposure limits. Environmental Geosciences, 11: 169_178 104. Weidauer E, Lehmann T, Rämisch A, Röhrlanz E, Foth H (2004) Response of rat alveolar type II cells and human lung tumor cells towards oxidative stress induced by hydrogen peroxide and paraquat. TOXICOL LETT, 151: 69_78 105. Foth H (2005) Requirements for EUROTOX registered Toxicologist and Options for Post graduate Training and Education. Biologia Bratislava, 60: 5_8 106. Foth H (2005) [Not only eggs from free roaming chickens are contaminated. How dangerous is dioxin in foods?]. MMW FORTSCHR MED, 147: 16 107. Foth H, Degen GH, Bolt HM (2005) New aspects in the classification of carcinogens. ARH HIG RADA TOKSIKO, 56: 167_75 108. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2005) Feinstaub durch Straßenverkehr" Bundespolitischer Handlungsbedarf. SRU, 6: 1_22 109. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2005) Die Registrierung von Chemikalien unter dem REACH_Regime Prioritätensetzung und Untersuchungstiefe. SRU, 8: 1_53 110. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2005) "Kontinuität in der Klimapolitik" Kyoto_Protokoll als Chance. SRU, 7: 1_19 111. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2005) Rechtsschutz für die Umwelt_ die altruistische Verbandsklage ist unverzichtbar. SRU, 5: 1_33 112. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2005) Auf dem Weg zur Europäischen Ressourcenstrategie: Orientierung durch ein Konzept für eine stoffbezogene Umweltpolitik. SRU, 9: 1_15 113. Lehmann T, Torky AR, Stehfest E, Hofmann HS, Foth H (2005) Expression of lung resistance_related protein, LRP, and multidrug resistance_related protein, MRP1, in normal human lung cells in long_term cultures. ARCH TOXICOL, 79: 600_9 114. Stehfest E, Torky A, Ghahn F, Foth H (2005) Non_destructive micromethod for MRP1 functional assay in human lung tumor cells. ARCH TOXICOL, 79: 1_9 115. Torky AR, Stehfest E, Viehweger K, Taeger C, Foth H (2005) Immuno_histological detection of MRPs in human lung cells in culture. TOXICOLOGY, 207: 437_50 116. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2006) Der Umweltschutz in der Föderalismusreform. SRU, 10: 1_41 117. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren vC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2006) Die nationale Umsetzung des europäischen Emissionshandels: Marktwirtschaftlicher Klimaschutz oder Fortsetzung der energiepolitischen Subventionspolitik mit anderen Mitteln. SRU, 11: 1_14 118. Hengstler JG, Foth H, Kahl R, Kramer PJ, Lilienblum W, Schulz T, Schweinfurth H (2006) The REACH concept and its impact on toxicological sciences. TOXICOLOGY, 220:

232_9 119. Foth H (2007) Organ Toxicity _ Liver Example. EUROTOX Basic Toxicology Course 16._22.09. 07 Stará Lesná, Slovakia, 1: 55_69 120. Foth H (2007) What is REACH? EUROTOX Basic Toxicology Course 16._22.09. 07 Stará Lesná, Slovakia, 1: 8_22 121. Foth H (2007) TOXICOKINETICS _ Absorption, Distribution, Metabolism, Elimination. EUROTOX Basic Toxicology Course 16._22.09. 07 Stará Lesná, Slovakia, 1: 70_83 122. Foth H (2007) New Aspects on Mercury and Human Health. EUROTOX Basic Toxicology Course 16._22.09. 07 Stará Lesná, Slovakia, 1: 23_35 123. Foth H (2007) Dose_Effect Relationships. EUROTOX Basic Toxicology Course 16._22.09. 07 Stará Lesná, Slovakia, 1: 84_95 124. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2007) Arzneimittel in der Umwelt. SRU, 12: 1_51 125. Foth H (2008) [Responsibilities of the European Chemical Agency under REACH]. BUNDESGESUNDHEITSBLA, 51: 1398_407 126. Foth H (2008) [Risk assessment and chemical safety under REACH]. BUNDESGESUNDHEITSBLA, 51: 1387_97 127. Foth H, Kahl R (2008) [REACHan ambitious project on the path to chemical safety]. BUNDESGESUNDHEITSBLA, 51: 1379_80 128. Foth H, Hayes A (2008) Background of REACH in EU regulations on evaluation of chemicals. HUM EXP TOXICOL, 27: 443_61 129. Foth H, Hayes A (2008) Concept of REACH and impact on evaluation of chemicals. HUM EXP TOXICOL, 27: 5_21 130. Glahn F, Schmidt Heck W, Zellmer S, Guthke R, Wiese J, Golka K, Hergenröder R, Degen GH, Lehmann T, Hermes M, Schormann W, Brulport M, Bauer A, Bedawy E, Gebhardt R, Hengstler JG, Foth H (2008) Cadmium, cobalt and lead cause stress response, cell cycle deregulation and increased steroid as well as xenobiotic metabolism in primary normal human bronchial epithelial cells which is coordinated by at least nine transcription factors. ARCH TOXICOL, 82: 513_24 131. Lilienblum W, Dekant W, Foth H, Gebel T, Hengstler JG, Kahl R, Kramer PJ, Schweinfurth H, Wollin KM (2008) Alternative methods to safety studies in experimental animals: role in the risk assessment of chemicals under the new European Chemicals Legislation (REACH). ARCH TOXICOL, 82: 211_36 132. Strauss K, Scharpenberg H, Crewe R, Glahn F, Foth H, Moritz R (2008) The role of the queen mandibular gland pheromone in honeybees (Apis mellifera): honest signal or suppressive agent? BEHAV ECOL SOCIOBIOL, 62: 1523 1531 133. Torky A, Raemisch A, Glahn F, Foth H (2008) Arachidonic acid pathway activates multidrug resistance related protein in cultured human lung cells. ARCH TOXICOL, 82: 323_32 134. Foth H (2009) Safety for people and environment. TOXICOL LETT, 189: 1_2 135. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2009) Abscheidung, Transport und Speicherung von Kohlendioxid Der Gesetzentwurf der Bundesregierung im Kontext der Energiebedeckte. SRU, 13: 1_38 136. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2009) Setting the Course for a Sustainable Electricity System 5 Propositions. SRU, 4: 1_24 137. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2009) Für eine zeitgemäße Gemeinsame Agrarpolitik (GAP). SRU, 14: 1_30 138. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2009) Sustainable Development, Innovation and Climate Protection a German Perspective. SRU, 1: 1_207 139. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2009) Toxic Substances and REACH. SRU, 3: 1_94 140. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2010) 100% erneuerbare Stromversorgung bis 2050: klimaverträglich, sicher, bezahlbar. SRU, 15: 1_92 141. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2010) Land Use, Nature Conservation and Agricultural Policies in Germany. SRU, 2: 1_288 142. Ahmad M, Torky A, Glahn F, Scheubel RJ, Foth H (2011) PARP_1 expression and activity in primary human lung cells. ARCH TOXICOL, 85: 669_79 143. Hengstler JG, Foth H, Gebel T, Kramer PJ, Lilienblum W, Schweinfurth H, Völkel W, Wollin KM, Gundert_Remy U (2011) Critical evaluation of key evidence on the human health hazards of exposure to bisphenol A. CRIT REV TOXICOL, 41: 263_291 144. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2011) Fischbestände nachhaltig bewirtschaften. SRU, 16: 1_49 145. Foth H, Calliess C, Bradke H, Holm Müller K, Niekisch M, Schreurs M, Faulstich M (2012) Für einen wirksamen Meeresnaturschutz: Fischereimanagement in Natura 2000_Gebieten in der deutschen AWZ. SRU, 17: 1_21 146. Foth H, Calliess C, Bradke H, Holm Müller K, Niekisch M, Schreurs M, Faulstich M (2013) Fracking zur Schiefergasgewinnung Ein Beitrag zur energie_ und umweltpolitischen Bewertung. SRU, 1_56 147. Ge Y, Wang DZ, Chiu JF, Cristobal S, Sheehan D, Silvestre F, Peng X, Li H, Gong Z, Hong Lam S, Wentao H, Iwashashi H, Liu J, Mei N, Shi L, Bruno M, Foth H, Teichman K (2013) Environmental OMICS: Current Status and Future Directions. JIOMICS, 3: 75_87 148. Gebel T, Foth H, Damm G, Freyberger A, Kramer PJ, Lilienblum W, Röhl C, Schupp T (2014) Manufactured nanomaterials: categorization and approaches to hazard assessment. Arch Tox 88:2191_2211 149. Foth H, Salomon M, Wiese J (2015) Stickstoffbelastung der Gewässer – weiter ein ungelöstes Problem? DVGW Jahresbericht, 5. 66: 89_91 150. Gundert_Remy U, Damm G, Foth H, Freyberger A, Gebel T, Golka K, Röhl C, Schupp T, Wollin KM, Hengstler JG (2015) High exposure to inorganic arsenic by food: the need for risk reduction. ARCHIVES OF TOXICOLOGY, 89: 2219_27 151. Foth H, Calliess C, Bradke H, Holm Müller K, Niekisch M, Schreurs M, Faulstich M Stickstoff: Lösungsstrategien für ein drängendes Umweltproblem. Sondergutachten 2015 152. Foth H. (2016) Grenzwerte in der Toxikologie, In Hrsg. Ulrich Smeddinck/Claudia König Grenzwertbildung im Strahlenschutz _ Physik, Recht, Toxikologie: Grundlagen, Kontraste, Perspektiven; ISBN_10: 3830537018 153. Foth H, Calliess C, Bradke H, Holm Müller K, Niekisch M, Schreurs M, Faulstich M (2016) Umweltgutachten, Kapitel 6 „verbesserter Schutz der Biodiversität vor Pestiziden“ 154. Niekisch M, Foth H, Calliess C, Bradke H, Holm Müller K, Schreurs M, Faulstich M (2016) Umweltgutachten, Kapitel 6 „mehr Raum für Wildnis“ 155. Vos JC, Dragovic S, Jochimsen M, Dirach J, Foth H, Wiese J, Bjerrum OJ (2017) From Face_to_Face training to blended learning in the postgraduate program SafeSciMET _ a case study. European Journal of Pharmaceutical Sciences, 97: III_ VIII 156. Faustman EM, Foth H, Schiesari L, Navoni JA, Berlanga de Moraes Barros S, de Aragão Umbuzeiro G, Smith MN, (2018) Water Security, Integrating Lessons Learned for Water Quality, Quantity and Sustainability. In Tom Beer editor Global change and future earth: the Geoscience perspective Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2018. (in press) Monography 1. Foth H (2004) Sicherheitsfaktoren bei der toxikologischen Bewertung von Chemikalien. S. Hirzel Wissenschaftliche Verlagsgesellschaft, Stuttgart 2. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2004) Umweltpolitische Handlungsfähigkeit sichern. Nomos Verlagsgesellschaft, Baden_Baden 3. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2005) Umwelt und Straßenverkehr. Nomos Verlagsgesellschaft, Baden_Baden 4. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2007) Umweltverwaltungen unter Reformdruck. Erich Schmidt Verlag, Berlin 5. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2007) Klimaschutz durch Biomasse. Erich Schmidt Verlag, Berlin 6. Sachverständigenrat für Umweltfragen (SRU) (Koch HJ, Haaren VC, Faulstich M, Foth H, Jänicke M, Michaelis P, Ott K) (2008) Umweltgutachten 2008, Umweltschutz im Zeichen des Klimawandels. Erich Schmidt Verlag, Berlin 7. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2011) Vorsorgestrategien für Nanomaterialien. Erich Schmidt Verlag, Berlin 8. Sachverständigenrat für Umweltfragen (SRU) (Faulstich M, Foth H, Calliess C, Höhmeyer O, Holm Müller K, Niekisch M, Schreurs M) (2011) Wege zur 100 % erneuerbaren Stromversorgung. Erich Schmidt Verlag, Berlin Books 1. Foth H (1999) Ecotoxicology. In: Hans Marquardt, Siegfried G Schäfer, Roger McClellan, Frank Welsch (Hg.) Toxicology. Academic PressSan Diego, London, Boston, New York, Sydney, Tokio, Toronto, San Diego, California, USA, 1067_1085 2. Becker R, Wolff I (2000) Die Umweltrelevanz des Chemieunfalls in Schönebeck und mögliche gesundheitliche Auswirkungen auf den Menschen. In: Universität Halle (Hg.) Die Umweltrelevanz des Chemieunfalls in Schönebeck. Universität Halle_Wittenberg, Halle/Saale, 1_92 3. Foth H (2002) Umwelttoxikologie. In: Hans Marquardt, Siegfried G Schäfer, (Hg.) Lehrbuch der Toxikologie. Wiss. Verlagsgesellschaften Stuttgart, Stuttgart, 54_63 4. Foth H, Wolff I, Nikolova T, Walcher S, Mueller SP, Becker R (2003) Zytogenetische Untersuchungen zur Langzeitwirkung von Vinylchlorid an einer Humanpopulation nach Umweltunfall. In: Foth H (Hg.) Risk assessment and management of large contamination sites. Universitätszentrum für Umweltwissenschaften, Halle, 113_116 5. Golka K, Seidel T, Rötzel C, Geller F, Bolt HM, Staude G, Foth H, Thier R (2003) Berufliche und außerberufliche Risikofaktoren bei Harnblasenkarzinopatienten in der Lutherstadt Wittenberg. In: Foth H. (Hg.) Risk assessment and management of large contamination sites : Proceedingsband zum Kongress an der Martin_Luther_Universität Halle_Wittenberg, 22. _ 24. Februar 2002. _ Halle (Saale). Universitätszentrum für Umweltwissenschaften, Halle / Saale, 109_112 6. Foth H (2004) Umwelttoxikologie. In: Marquardt, Hans; Schäfer, Siegfried G. (Hg.) Lehrbuch der Toxikologie. Wissenschaftliche Verlagsgesellschaft, Stuttgart, 1123_1133 7. Foth H, Stahlmann R (2004) Arzneitherapie in Schwangerschaft und Stillzeit. In: Lemmer B, Brune K. (Hg.) Pharmakotherapie. Springer, Berlin, 481_505 8. Foth H (2007) Gibt es ein Feinstaub_ oder Quecksilberproblem bei der Abfallverbrennung? In: Thomé_Kozmiensky K J, Beckmann M (Hg.) Energie aus Abfall.

TK Verlag, Nietwerder, 377_399 9. Torky AR, Foth H (2007) Quecksilber. In: Dunkelberg H, Gebel T, Hartwig A (Hg.) Handbuch der Lebensmitteltoxikologie Band 2. Wiley_VCH Verlag, Weinheim, 803_850 10. Foth H (2008) Chemikaliensicherheit _ naturwissenschaftliche Grundlagen, Bewertungsstrategien, Herausforderungen. In: Hendl, Reinhard (Hg.) Neues europäisches Chemikalienrecht (REACH). Erich Schmidt Verlag, Berlin, 11_33 11. Foth H, Stahlmann R (2010) Arzneitherapie in Schwangerschaft und Stillperiode. In: Lemmer, Björn; Brune, Kay (Hg.) Pharmakotherapie. Springer, Berlin, 435_453 12. Ge Y, Bruno M, Foth H (2011) Application of proteomic technologies to toxicology. In: Casciano Daniel A, Sahu Saura C (Hg.) Handbook of Systems Toxicology Handbook of Systems Toxicology. John Wiley & Sons Ltd., Chichester, UK, 197_215

Projects

Professional experience concerns metabolism of tobacco smoke constituents, kinetics of am-ide type local anaesthetics in lung and heart, kinetics and metabolism of cytostatics drugs (fluorinated pyrimidines), activity and regulation of ABC transporters of the MDR and MRP family in lung, clinical toxicology (University of Göttingen, service unit clinical toxicology analyses and advising), environmental health, toxicity and effects of metals, response of primary human lung cells to metal stress, expression and function of PARP-1 in primary human lung cells and primary human lung cell cultures (dry-wet; 3D configuration) and effects of nanoscaled particles in human lung cell cultures (dry-wet; 3D configuration)

Memberships

National activities as Commissions (member) comprises Committee on Drug Safety (Federal Institute for Drugs and Medical Devices BfArM, Commission C (homeopathic drugs), Commission D (anthroposophic medicine), advisory committee on chemicals (BUA, GDCh) and since 09-2015 chair of the working group carcinogens and mutagens (AK-CM) in the subcommittee on hazard risk management (UA III) of the Committee on hazardous Substances (AGS). She was member of the Advisory Council on the Environment (SRU) of the Federal Republic of Germany (2004-2016).

Heidi Foth was President (2004-2006; 2007-2009; 2009-2010) of German Society of Toxicology - President (2005 and 2008)/Vicepresident (2004-2009) of German Society for Experimental and Clinical Pharmacology and Toxicology and member of the executive committee of the European Societies of Toxicology, EUROTOX (member of EC, chair of SC Education). She was member (treasurer) of the EC of International Union of Toxicological Societies (IUTOX) 2010-2013, and 2013-2016.

Other Relevant Information