

## 6. LITERATUR

- Aboobaker, A.A.; Blaxter, M.L. (2000): Medical significance of *Caenorhabditis elegans*. Ann. Med. 32: 23-30.
- Afshari, C.A.; Nuwaysir, E.F.; Barrett, J.C. (1999): Application of complementary DNA microarray technology to carcinogen identification, toxicology, and drug safety evaluation. Cancer Research 59: 4759-4760.
- Alzieu, C. (2000): Impact of tributyltin on marine invertebrates. Ecotoxicology 9: 71-76.
- Ankeny, R.A. (2001): The natural history of *Caenorhabditis elegans* research. Nature Reviews: Genetics 2: 474-478.
- Ashour, M.B.; Moody, D.E.; Hammock, B.D. (1987): Apparent induction of microsomal carboxylesterase activities in tissues of clofibrate-fed mice and rats. Toxicol. Appl. Pharmacol. 89:361-369.
- Bagchi, D.; Bhattachary, G.; Stohs, S.J. (1996): In vitro and in vivo induction of heat shock (stress) protein (Hsp) gene expression by selected pesticides. Toxicology 112: 57-68.
- Bartosiewicz, M.; Penn, S.; Buckpitt, A. (2002): Applications of gene arrays in environmental toxicology: fingerprints of gene regulation associated with cadmium chloride, benzo(a)pyrene and trichloroethylene. Environmental Health Perspective 109 (1): 71-74.
- Bartosiewicz, M.J.; Jenkins, D.; Penn, S.; Emery, J.; Buckpitt, A. (2001): Unique gene expression patterns in liver and kidney associated with exposure to chemical toxicants. JPET 297: 895-905.
- Baumeister, R. (2002): The worm in us - *Caenorhabditis elegans* as a model of human disease. Trends in Biotechnology 20 (4): 147-148.
- Bierkens, J.; Klein, G.; Corbisier, P.; Van den Heuvel, R.; Verschaeve, L.; Weltens, R.; Schoeters, G. (1998): Comparative sensitivity of 20 bioassays for soil quality. Chemosphere 37 (14-15): 2935-2947.
- Blaxter, M. (1998): *Caenorhabditis elegans* is a nematode. Science 282: 2041-2046.
- Board, P.G.; Chelvanayagam, G.; Jermini, L.S.; Tetlow, N.; Tzeng, H.-F.; Anders, M.W.; Blackburn, A.C. (2001): Identification of novel glutathione transferases and polymorphic variants by expressed sequence tag database analysis. Drug Metabolism and Disposition 29: 544-547.

- Bock, K.W.; Lipp, H.-P.; Bock-Henning, B.S. (1990): Induction of drug-metabolizing enzymes by xenobiotics. *Xenobiotica* 20 (11): 1101-1111.
- Braxton, S.; Bedilion, T. (1998): The integration of microarray information in the drug development process. *Current Opinion in Biotechnology* 9: 643-649.
- Brenner, S. (1974): The genetics of *Caenorhabditis elegans*. *Genetics* 77: 71-94.
- Briggs, M.P. (1946): Cultur methods for a free-living nematode. M.A. Thesis, Stanford University, Stanford, CA, USA.
- Candido, E.P.; Jones, D. (1996): Transgenic *Caenorhabditis elegans* strains as biosensors. *Trends in Biotechnol.* 14: 125-129.
- Cheung, V.G.; Morley, M.; Aguilar, F.; Massimi, A.; Kucherlapati, R.; Childs, G. (1999): Making and reading microarrays. *Nature Genetics* 21: 15-19.
- Chomczynski, P.; Sacchi, N. (1987): Single-step method of RNA isolation by acid guanidinium thiocyanate-phenol-chloroform extraction. *Anal. Biochem.* 162 (1): 156-159.
- Cioci, L.K.; Qiu, L.; Freedman, J.H. (2000): Transgenic strains of the nematode *Caenorhabditis elegans* as biomonitor of metal contamination. *Environ. Toxicol. Chem.* 19 (8): 2122-2129.
- Coller, H.A.; Grandori, C.; Tamayo, P.; Colbert, T.; Lander, E.S.; Eisenman, R.N.; Golub, T.R. (2000): Expression analysis with oligonucleotide microarrays reveals that MYC regulates genes involved in growth, cell cycle, signaling, and adhesion. *PNAS* 97 (7): 3260-3265.
- Cui, X.; Kawashima, H.; Barclay, T.B.; Peters, J.M.; Gonzalez, F.J.; Morgan, E.T.; Strobel, H.W. (2001): Molecular cloning and regulation of expression of two novel mouse CYP4F genes: expression in peroxisome proliferator-activated alpha-deficient mice upon lipopolysaccharide and clofibrate challenges. *JPET* 296 (2): 542-550.
- Culetto, E.; Satelle, D.B. (2000): A role for *Caenorhabditis elegans* in understanding the function and interactions of human disease genes. *Human Molecular Genetics* 9 (6): 869-877.
- Custodia, N.; Won, S.J.; Novillo, A.; Wieland, M.; Li, C.; Callard, I.P. (2001): *Caenorhabditis elegans* as an environmental monitor using DNA microarray analysis. *Annals of the New York Academy of Sciences* 948: 32-42.

- David, H.E.; Dawe, A.S.; de Pomerai, D.I.; Jones, D.; Candido, E.P.M.; Daniells, C. (2003): Construction and evaluation of a transgenic hsp16-GFP-lacZ *Caenorhabditis elegans* strain for environmental monitoring. Environmental Toxicology and Chemistry 22 (1): 111-118.
- Davis, P.H. (1973): Effects of chemical variations in aquatic environments. Vol III. Lead toxicity to rainbow trout and testing application factor concept. EPA-R3-73-011c. Ecological Research Report. Office of Research and Monitoring, U.S. Environmental Protection Agency, Washington, DC.
- de Longueville, F.; Atienzar, F.A.; Marcq, L.; Dufrane, S.; Evrard, S.; Wouters, L.; Leroux, F.; Bertholet, V.; Gerin, B.; Whomsley, R.; Arnould, T.; Remacle, J.; Canning, M. (2003): Use of a low-density microarray for studying gene expression patterns induced by hepatotoxicants on primary cultures of rat hepatocytes. Toxicological Sciences 75: 378-392.
- Debouck, C.; Goodfellow, P.N. (1999): DNA microarrays in drug discovery and development. Nature Genetics Supplement 21: 48-50.
- Del Sal, G.; Manfioletti, G.; Schneider, C. (1988): A one-tube plasmid DNA mini-preparation suitable for sequencing. Nucleic Acids Research 16 (20): 9878.
- Dhawan, R.; Dusenberry, D.B.; Williams, P.L. (1999): Comparison of lethality, reproduction, and behavior as toxicological endpoints in the nematode *Caenorhabditis elegans*. Toxicol. Environ. Health A. 58 (7): 451-462.
- Dogra, S.C.; Whitelaw, M. L.; May, B.K. (1998): Transcriptional activation of cytochrome P450 genes by different classes of chemical inducers. Clinical and Experimental Pharmacology and Physiology 25: 1-9.
- Donkin, S.G.; Dusenberry, D.B. (1993): A soil toxicity test using the nematode *Caenorhabditis elegans* and an effective method of recovery. Arch. Environ. Contam. Toxicol. 25: 145-151.
- Duggan, D.J.; Bittner, M.; Chen, Y.; Meltzer, P.; Trent, J.M. (1999): Expression profiling using cDNA microarrays. Nature Genetics Supplement 21: 10-14.
- EI Jay, A. (1996): Effects of organic solvents and solvent-atrazine interactions on two algae, *Chlorella vulgaris* and *Selenastrum capricornutum*. Arch. Environ. Contam. Toxicol. 31: 84-90.
- Epstein, H.F.; Shakes, D.C (1995): *Caenorhabditis elegans* - modern biological analysis of an organism. Academic Press.

- Ermantraut, E. (1999): Herstellung von biomolekularen Arrays - eine technologische Herausforderung. *Medgen* 11: 6-11.
- Fent, Karl (2003): Ökotoxikologie. Georg Thieme Verlag, Stuttgart.
- Freedman, J.H.; Slice, L.W.; Dixon, D.; Fire, A.; Rubin, C.S. (1993): The novel metallothionein genes of *Caenorhabditis elegans* - structural organization and inducible, cell-specific expression. *Journal of Biological Chemistry* 268:2554-2564.
- Gerhold, D.; Lu, M.; Xu, J.; Austin, C.; Caskey, C.T.; Rushmore, T. (2001): Monitoring expression of genes involved in drug metabolism and toxicology using DNA microarrays. *Physiol. Genomics* 5: 161-170
- Gonzales, F.J. (1989): The molecular biology of cytochrome P450s. *Pharmacological Reviews* 40: 244-288.
- Gotoh, O. (1998): Divergent structures of *Caenorhabditis elegans* cytochrom P450 genes suggest the frequent loss and gain of introns during the evolution of nematodes. *Mol. Biol. Evol.* 15 (11): 1447-1459.
- Guengerich, F.P. (2001): Uncommon P450-catalyzed reactions. *Current Drug Metabolism* 2: 93-115.
- Hamza-Chaffai, A.; Amiard-Triquet, C.; El Abed, A. (1997): Metallothionein-like protein: is it an efficient biomarker of metal contamination? A case study based on fish from the tunisian coast: *Arch. Environ. Contam. Toxicol.* 33: 53-62.
- Hassanein, H.M.A.; Banhawy, M.A.; Soliman, F.M.; Abdel-Rehim, S.A.; Müller, W.E.G.; Schröder, H.C. (1999): Induction of hsp70 by the herbicide Oxyfluorfen (goal) in the egyptian nile fish *Oreochromis niloticus*. *Arch. Environ. Contam. Toxicol.* 37: 78-84.
- Hedgecock, E.M.; Sulston, J.E.; Thomson, J.N. (1983): Mutations affecting programmed cell death in the nematode *Caenorhabditis elegans*. *Science* 220: 1277-1279.
- Hill, A.A.; Hunter, C.P.; Tsung, B.T.; Tucker-Kellogg, G.; Brown, E.L. (2000): Genomic Analysis of gene expression in *C. elegans*. *Science* 290: 809-812.
- Hitchcock, D.R.; Black, M.C.; Williams, P.L. (1997): Investigations into using the nematode *Caenorhabditis elegans* for municipal and industrial wastewater toxicity testing. *Arch. Environ. Contam. Toxicol.* 33: 252-260.

- Hodgkin, J. (2001): What does a worm want with 20,000 genes? *Genome Biology* 2 (11): 2008.1-2008.4.
- Hosokawa, M.; Maki, T.; Satoh, T. (1988): Differences in the induction of carboxylesterase isozymes in rat liver microsomes by xenobiotics. *Biochem. Pharmacol.* 37: 2708-2711.
- Höss, S.; Henschel, T.; Haitzer, M.; Traunspurger, W. (2001): Toxicity of cadmium to *Caenorhabditis elegans* (nematoda) in whole sediment and pore water-the ambiguous role of organic matter. *Environ. Toxicol. Chem.* 20 (12): 2794-2801.
- Hupfeld, H. (2002): *Caenorhabditis elegans*. Zentrale für Unterrichtsmedien im Internet e.V. <http://www.zum.de/Faecher/Materialien/hupfeld/Entwicklung/C-elegans.html>
- Jasmer, D.P.; Roth, J.; Myler, P.J. (2001): Cathepsin B-like cysteine proteases and *Caenorhabditis elegans* homologues dominate gene products expressed in adult *Haemonchus contortus* intestine. *Molecular and Biochemical Parasitology* 116 (2): 159-169.
- Jiang, M.; Ryu, J.; Kiraly, M.; Duke, K.; Reinke, V.; Kim, S.K. (2001): Genome-wide analysis of development and sex-regulated gene expression profiles in *Caenorhabditis elegans*. *Proc. Natl. Acad. Sci.* 98 (1): 218-223.
- Johnstone, I.L. (1994): The cuticle of the nematode *Caenorhabditis elegans*: a complex collagen structure. *BioEssays* 16: 171-178.
- Johnstone, I.L. (2000): Cuticle collagen genes expression in *Caenorhabditis elegans*. *Trends in Genetics* 16 (1): 21-27.
- Jones, D.; Stringham, E.G.; Babich, S.L.; Candido, E.P.M. (1996): Transgenic strains of the nematode *C. elegans* in biomonitoring and toxicology: effects of captan and related compounds on the stress response. *Toxicology* 109 (2-3): 119-127.
- Jorgensen, E.M.; Mango, S.E. (2002): The art and design of genetic screens: *Caenorhabditis elegans*. *Nature Reviews Genetics* 3: 356-369.
- Kammenga, J.E.; Van Koert, P.H.G.; Riksen, J.A.G.; Korthals, G.W.; Bakker, J. (1996): A toxicity test in artificial soil based on the life-history strategy of the nematode *Plectus acuminatus*. *Environmental Toxicology and Chemistry* 15 (5): 722-727.

- Kari, C.K.; Herman, R.K.; Shaw, J.E.; Cygnar, K.; Yochem, J.J. (2000): Genetic analysis of gene redundancy. Midwest Worm Meeting.
- Katchamart, S.; Miranda, C.L.; Henderson, M.C.; Pereira, C.B.; Buhler, D.R. (2002): Effect of xenoestrogen exposure on the expression of cytochrome P450 isoforms in rainbow trout liver. Environ. Toxicol. Chem. 21 (11): 2445-2451.
- Kim, S.K.; Lund, J.; Kiraly, M.; Duke, K.; Jiang, M.; Stuart, J.M.; Eizinger, A.; Wylie, B.N.; Davidson, G.S. (2001): A gene expression map for *Caenorhabditis elegans*. Science 239: 2087-2092.
- King, C.D.; Rios, G.R.; Green, M.D.; Tephly, T.R. (2000): UDP-Glucuronosyltransferases. Current Drug Metabolism 1: 143-161.
- Klaassen, C.D.; Liu, J.; Choudhuri, S. (1999): Metallothionein: An intracellular protein to protect against cadmium toxicity. Annu. Rev. Pharmacol. Toxicol. 39: 267-294.
- Köhler, H.-R.; Knödler, C.; Zanger, M. (1999): Divergent kinetics of hsp70 induction in *Oniscus asellus* (Isopoda) in response to four environmentally relevant organic chemicals (B(a)P, PCB52, gamma-HCH, PCP): suitability and limits of a biomarker. Arch. Environ. Contam. Toxicol. 36: 179-185.
- Kohra, S.; Tominaga, N.; Mitsui, Y.; Takao, Y.; Ishibashi, Y.; Arizono, K. (1999): Determination of a screening system of endocrine disruptors by the induction of vitellogenin mRNA in *C. elegans* larvae. J. Health Science 45: 37.
- Kramer, J.M. (1994): Structure and functions of collagens in *Caenorhabditis elegans*. FASEB Journal 8: 329-336.
- Lagido, C.; Pettitt, J.; Porter, A.J.R.; Paton, G.I.; Glover, L.A. (2001): Development and application of bioluminescent *Caenorhabditis elegans* as multicellular eukaryotic biosensors. FEBS Letters 493: 36-39.
- Larkin, P.; Folmar, L.C.; Hemmer, M.J.; Poston, A.J.; Denslow, N.D. (2003): Expression profiling of estrogenic compounds using a sheepshead minnow cDNA macroarray. Environmental Health Perspectives Toxicogenomics 111 (1T): 29-36.
- Levine, S.T.; Oris, J.T. (1999): CYP1A expression in liver and gill of rainbow trout following waterborne exposure: implications for biomarker determination. Aquatic Toxicology 46: 279-287.

- Liao, V.H.C.; Freedman, J.H. ((1998): Cadmium-regulated genes from the nematode *Caenorhabditis elegans* - Identification and cloning of new cadmium-responsive genes by differential display Journal of Biological Chemistry 273: 31962-31970.
- Link, C.D.; Cypser, J.R.; Johnson, C.J.; Johnson, T.E. (1999): Direct observation of stress response in *Caenorhabditis elegans* using a reporter transgene. Cell Stress & Chaperones 4 (4): 235-242.
- Lock, E.A.; Reed, C.J. (1998): Xenobiotic metabolizing enzymes of the kidney. Toxicologic Pathology 26 (1): 18-25.
- MacMorris, M.A.; Blumenthal, T.E. (1993): In situ analysis of *C. elegans* vitellogenin fusion gene expression in integrated transgenic strains - effects of promotor mutations on RNA localization. Gene Expression 3: 27-36.
- Mallo, G.V.; Kurz, C.L.; Couillault, C.; Pujol, N.; Granjeaud, S.; Kohara, Y.; Ewbank, J.J. (2002): Inducible antibacterial defense system in *C. elegans*. Current Biology 12 (14): 1209-1214.
- McClain, J.S.; Oris, J.T.; Burton Jr., G.A.; Lattier, D. (2002): Laboratory and field validation of multiple molecular biomarkers of contaminant exposure in rainbow trout (*Oncorhynchus mykiss*). Environmental Toxicology and Chemistry 22 (2): 361-370.
- Mentlein, R.; Rix-Matzen, H.; Heymann, E. (1988): Subcellular localization of non-specific carboxylesterases, acylcarnitine hydrolase, monoacylglycerol lipase and palmitoyl-CoA hydrolase in rat liver. Biochim. Biophys. Acta 964:319-328.
- Menzel, R.; Bogaert, T.; Achazi, R. (2001): A systematic gene expression screen of *Caenorhabditis elegans* cytochrome P450 genes reveals CYP35 as strongly xenobiotic inducible. Archives of Biochemistry and Biophysics
- Mochii, M.; Yoshida, S.; Morita, K.; Kohara, Y.; Ueno, N. (1999): Identification of transforming growth factor-beta-regulated genes in *Caenorhabditis elegans* by differential hybridization of arrayed cDNAs. PNAS 96: 15020-15025.
- Mount, D.I. (1977): An assessment of application factors in aquatic toxicology. Proceedings, Recent Advances in Fish Toxicology Symposium, Corvallis OR, USA: 183-190.
- Murphy, D. (2002): Gene expression studies using microarrays: principles, problems and prospects. Advances in Physiology Education 26 (4): 256-270.

- Mutwakil, M.H.A.Z.; Reader, J.P.; Holdich, D.M.; Smithurst, P.R.; Candido, E.P.M.; Jones, D.; Stringham, E.G.; de Pomerai, D.I. (1997): Use of stress-inducible transgenic nematodes as biomarkers of heavy metal pollution in water samples from an english river system. *Arch. Environ. Contam. Toxicol.* 32: 146-153.
- Nebert, D.W.; Gonzales, F.J. (1987): P450 genes: Structure, evolution, and regulation. *Annual Review of Biochemistry* 56: 945-993.
- Nelson, D.R. (1998): Metazoan cytochrome P450 evolution. *Comp. Biochem. Physiol. C* 121: 15-22.
- Nelson, D.R. (1999): Cytochrome P450 and the individuality of species. *Arch. Biochem. Biophys.* 369 (1): 1-10.
- Newman, M.C.; Ownby, D.R.; Mezin, L.C.A.; Powell, D.C.; Christensen, T.R.L.; Lerberg, S.B.; Anderson, B.-A. (2000): Applying species-sensitivity distributions in ecological risk assessment: assumptions of distribution type and sufficient numbers of species. *Environ. Toxicol. Chem.* 19 (2): 508-515.
- Niemann, R.; Debus, R. (1996): Nematodentest zur Abschätzung der chronischen Toxizität von Bodenkontaminationen. *Z. Umweltchem. Ökotox.* 8: 255-260.
- Nousiainen, U.; Torronen, R.; Hanninen, O. (1984): Differential induction of various carboxylesterases by certain polycyclic aromatic hydrocarbons in the rat. *Toxicology* 32: 243-51.
- Nuwaysir, E.F.; Bittner, M.; Trent, J.; Barrett, J.C.; Afshari, C.A. (1999): Microarrays and toxicology: the advent of toxicogenomics. *Molecular Carcinogenesis* 24:153-159
- Pemberton, K.D.; Barrett, J. (1989): The detoxification of xenobiotic compounds by *Onchocerca gutturosa* (Nematoda: Filarioidea). *International Journal for Parasitology* 19 (8): 875-878.
- Peredney, P.; Williams, P.L. (2000): Utility of *Caenorhabditis elegans* for assessing heavy metal contamination in artificial soil. *Arch. Environ. Contam. Toxicol.* 39: 113-118.
- Phimister, B. (1999): Going global. *Genetics supplement* 21 (1): 1.
- Powell-Coffman, J.; Bradfield, C.A.; Wood, W.B. (1998): *Caenorhabditis elegans* orthologs of the aryl hydrocarbon receptor and its heterodimerization partner the aryl hydrocarbon receptor nuclear translocator. *Proc. Natl. Acad. Sci.* 95: 2844-2849.

- Power, R.S.; David, H.E.; Mutwakil, H.A. Z.; Fletcher, K.; Daniells, C.; Nowell, M.A.; Dennis, J.L.; Martinelli, A.; Wiseman, R.; Wharf, E.; De Pomerai, D.I. (1998): Stress-inucible transgenic nematodes as biomonitoring of soil and water pollution. *J. Biosci.* 23(4): 513-526.
- Reinke, V.; Smith, H.E.; Nance, J.; Wang, J.; Van Doren, C.; Begley, R.; Jones, S.J.M.; Davis, E.B.; Scherer, S.; Ward, S.; Kim, S.K. (2000): A global profile of germline gene expression in *C. elegans*. *Molecular Cell* 6: 605-616.
- Rödel, M. (2002): Entwicklung eines Reproduktionstests mit *Caenorhabditis elegans* in Flüssigkultur. Diplomarbeit, Freie Universität Berlin.
- Sabatti, C. (2002): Statistical issues in microarray analysis. *Current Genomics* 3 (1): 7-12.
- Sambrook, J.; Fritsch, E.F.; Maniatis, T. (1989): Molecular Cloning: A laboratory Manual. Cold Spring Harbor Laboratory Press, Cold spring Harbor, NY.
- Satoh, T.; Hosokawa, M. (1998): The mammalian carboxylesterases: from molecules to function. *Annu. Rev. Pharmacol. Toxicol.* 38: 257-288.
- Saul, N. (2004): Verwendbarkeit des C elegans Toxchips (cDNA-Microarray) in der Ökotoxikologie - Untersuchungen mit dem PAK Fluoranthen. Diplomarbeit, Freie Universität Berlin.
- Schena, M.; Heller, R.A.; Theriault, T.P.; Konrad, K.; Lachenmeier, E.; Davis, R.W. (1998): Microarrays: biotechnology's discovery platform for functional genomics. *Trends in Biotechnology* 16: 301-306.
- Schrenk, D. (1998): Impact of dioxin-type induction of drug-metabolizing enzymes on the metabolism of endo- and xenobiotics. *Biochem. Pharmacol.* 55: 1155-1162.
- Schuetz, E.G. (2001): Induction of cytochromes P450. *Current Drug Metabolism* 2: 139-147.
- Sherlock, G.; Hernandez-Boussard, T.; Kasarski, A.; Binkley, G.; Matese, J.C.; Dwight, S.S.; Kaloper, M.; Wenig, S.; Jin, H.; Ball, C.A.; Eisen, M.B.; Spellman, P.T.; Brown, P.O.; Botstein, D.; Cherry, J.M. (2001): The Stanford Microarray Database. *Nucleic Acids Research* 29 (1): 152-155.
- Sheweita, S.A. (2000): Drug-metabolizing enzymes: mechanisms and functions. *Current Drug Metabolism* 1: 107-132.

- Snyder, M.J. (1998): Identification of a new cytochrome P450 family, CYP45, from the lobster, *Homarus americanus*, and expression following hormone and xenobiotic exposures Arch. Biochem. Biophys. 358 (2): 271-276.
- Spieth, J.; Denison, K.; Kirtland, S.K.; Cane, J.; Blumenthal, T.E. (1985): The *C. elegans* vitellogenin genes: short sequence repeats in the promoter regions and homology to the vertebrate genes. Nucleic Acids Research 13: 5283-5295.
- Spike, C.A.; Shaw, J.E.; Davies, A.G.; Herman, R.K. (1999): Functional overlap between the *mec-8* gene and five *sym* genes in *C. elegans*. 12th International *C. elegans* Meeting.
- Steinert, S.A.; Pickwell, G.V. (1993): Induction of HSP70 proteins in mussels by ingestion of tributyltin. Mar. Environ. Res. 35 (1-2): 89-93.
- Sueyoshi, T.; Negishi, M. (2001): Phenobarbital response elements of cytochrome P450 genes and nuclear receptors. Annu. Rev. Pharmacol. Toxicol. 41: 123-143.
- Sulston, J.E.; Hodkin, J. (1988): In: The nematode *Caenorhabditis elegans* (Wood. W.B. Hrsg.). Cold Spring Harbor Laboratory Press.
- Suzuki, T.; Nishio, K.; Tanabe, S. (2001): The MRP family and anticancer drug metabolism. Current Drug Metabolism 2: 367-377.
- Tawe, W.N.; Eschbach, M.-L.; Walter, R.D.; Henkle-Dührsen, K. (1998): Identification of stress-responsive genes in *Caenorhabditis elegans* using RT-PCR differential display. Nucleic Acids Research 26 (7): 1621-1627.
- Tephly, T.R.; Burchell, B. (1990): UDP-glucuronosyltransferases: a family of detoxifying enzymes. TiPS 11: 276-279.
- Thakurta, D.G.; Palomar, L.; Stormo, G.D.; Tedesco, P.; Johnson, T.E.; Walker, D.W.; Lithgow, G.; Kim, S.; Link, C.D. (2002): Identification of a novel cis-regulatory element involved in the heat shock response in *Caenorhabditis elegans* using microarray gene expression and computational methods. Genome Research 12: 701-712.
- The *C. elegans* Sequencing Consortium (1998): Genome sequence of the nematode *Caenorhabditis elegans*. A platform for investigating biology. Science 282: 2012-2018.

- Tominaga, N.; Kohra, S.; Iguchi, T.; Arizono, K. (2003): A multi-generation sublethal assay of phenols using the nematode *Caenorhabditis elegans*. J. Health Science 49 (6):
- Traunspurger, W.; Haitzer, M.; Höss, S.; Beier, S.; Ahlf, W.; Steinberg, C. (1997): Ecotoxicological assessment of aquatic sediments with *Caenorhabditis elegans* (Nematoda) - a method for testing liquid medium and whole-sediment samples. Environ. Toxicol. Chem. 16 (2): 245-250.
- Traunspurger, W.; Steinberg, C.; Bongers, T. (1995): Nematoden in der ökotoxikologischen Forschung. UWSF-Zeitschrift für Umweltchemie und Ökotoxikologie 7 (2): 74-83.
- Tukey, R.H.; Strassburg, C.P. (2000): Human UDP-glucuronosyltransferases: metabolism, expression and disease. Annu. Rev. Pharmacol. Toxicol. 40: 581-616.
- Ura, K.; Kai, T.; Sakata, S.; Iguchi, T.; Arizono, K. (2002): Aquatic acute toxicity testing using the nematode *Caenorhabditis elegans*. J. Health Science 48 (6): 583-586.
- Van Kessel, W.H.M.; Brocades Zaalberg, R.W.; Seinen, W. (1989): Testing environmental pollutants on soil organisms: a simple assay to investigate the toxicity of environmental pollutants on soil organisms, using CdCl<sub>2</sub> and nematodes. Ecotoxicology and Environmental Safety 18: 181-190.
- Versteeg, D.J.; Belanger, S.E.; Carr, G.J. (1999): Understanding single-species and model ecosystem sensitivity: data-based comparison. Environ. Toxicol. Chem. 18 (6): 1329-1346.
- Vondracek, M.; Weaver, D.A.; Sarang, Z.; Hedberg, J.J.; Willey, J.C.; Wärngärd, L.; Grafström, R.C. (2002): Transcript profiling of enzymes involved in detoxification of xenobiotic and reactive oxygen in human normal and simian virus 40 t antigen-immortalized oral keratinocytes. Int. J. Cancer 99: 776-782.
- Whitlock, Jr. J.P. (1986): The regulation of cytochrome P-450 gene expression. Annual Review of Pharmacology and Toxicology 26: 333-369.
- Wu, L.; Thompson, D.K.; Li, G.; Hurt, R.A.; Tiedje, J.M.; Zhou, J. (2001): Development and evaluation of functional gene arrays for detection of selected genes in the environment. Appl. Environ. Microbiol. 67 (12): 5780-5790.

- Xu, W.; Bak, S.; Decker, A.; Paquette, S.M.; Feyereisen, R.; Galbraith, D.W. (2001): Microarray-based analysis of gene expression in very large gene families: the cytochrome P450 gene superfamily of *Arabidopsis thaliana*. *Gene* 272: 61-74.
- Yochem, J.J.; Kari, C.K.; Shaw, J.E.; Herman, R.K. (2001): An analysis of gene redundancy based on the *mec-8* gene. 13th International *C. elegans* Meeting.
- Zeytun, A.; McKallip, R.J.; Fisher, M.; Camacho, I.; Nagarkatti, M.; Nagarkatti, P.S. (2002): Analysis of 2,3,7,8-tetrachlorodibenzo-p-dioxin-induced gene expression profile using pathway-specific cDNA arrays. *Toxicology* 178 (3): 241-260.
- Zhang, D.; Yang, Y.; Leakey, J.E.A.; Cerniglia, C.E. (1996): Phase 1 and phase 2 enzymes produced by *Cunninghamella elegans* for the metabolism of xenobiotics. *FEMS Microbiology Letters* 138: 221-226.

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Wormbase Datenbank: [www.wormbase.org/](http://www.wormbase.org/).

Blast Datenbank: <http://www.ncbi.nlm.nih.gov/blast/>.

Stanford Microarray Datenbank: <http://genome-www5.stanford.edu/cgi-bin/login.pl>.