

Curriculum Vitae

Last name, First name: van Benthem, Jan

Gender: male

Nationality: Dutch

Overall Scientific Expertise:

Dr. Jan van Benthem is a senior scientist and head of the Department of Innovative Testing Strategies of the Centre for Health Protection at the National Institute for Public Health and the Environment (RIVM, The Netherlands).

From 1981–1986 he investigated the day–night rhythmicity in the production of specific hormones in the pineal gland of golden hamsters at the University of Utrecht, The Netherlands. This work resulted in his PhD in 1986. From 1986–1992 he was a postdoctoral research fellow, funded by the Dutch Cancer Society, in the Netherlands Cancer Institute (NCI) in Amsterdam studying the formation of specific DNA adducts after treatment with nitrosamines using immunocytochemical staining methods. In 1992 he joined the laboratory of Prof. Dr. Georges Mohn at the RIVM where his main interest was the development of alternative test systems for mutagenicity. He also got involved in alternative test systems for mutagenicity and carcinogenicity based on sensitive transgenic mice models.

Since his appointment at the RIVM he became an advisor on risk assessment within the RIVM, for the Dutch Government and for the EU. He participated in various commissions (EU, ILSI-HESI, WHO, ECVAM, SCCS, EFSA) dealing with test guidelines, test guidance and strategies, and classification and labelling of chemicals and drugs. Since 2012 he is chair of ILSI-HESI's Genetic Toxicology Technical Committee (GTTC).

Professional Experience

Years employed from – to	Title of position	Employer – name and location	Areas of professional specialisation
1976-1980	Students assistant	University of Utrecht	Plant taxonomy
1981-1984	PhD student	University of Utrecht	Zoology – Endocrinology
1986-1992	Junior Scientist	Dutch Cancer Institute Antonie van Leeuwenhoek, Amsterdam	Oncology
1992-2009	Senior Scientist	Laboratory for Health Protection Research, National Institute for Public Health and the Environment	Genetic Toxicology
2009-2012	head of the Department of Carcinogenesis, Mutagenesis and Reproduction Toxicology	Laboratory for Health Protection Research, National Institute for Public Health and the Environment	Genetic Toxicology
2013-	Head of the Department of Innovative Testing Strategies	Centre for Health Protection, National Institute for Public Health and the Environment	Genetic Toxicology

Educational Background

Year	Degree awarded	Educational Institution – name and location	Areas of educational specialisation
1987	PhD	University of Utrecht	Zoology - Endocrinology
1981	Master	University of Utrecht	Zoology
1976	Bachelor	University of Utrecht	

Memberships in Scientific Advisory Bodies/Committees/Panels:

2000-2002	EU Subcommission, EU Toxicological Guidance Document in support of Commission Directive 93/67/EEC on Risk Assessment of new Notified Substances and Commission Regulation (EC) no 1488/94 on Risk Assessment for Existing Substances (TGD)”, member
2003-2004	ILSI HESI Technical Committee on Alternatives to Carcinogenicity Testing, Steering team on Future Experimental Needs, International Life Sciences Institute, Health and Environmental Sciences Institute, member
2003-2006	Expert Group on Risk Assessment of Genotoxic Carcinogens in Food, International Life Sciences Institute – European Branch, member
2003-2007	Commission Working group on the Classification and Labelling of Dangerous Substances, European Chemicals Bureau
2003-2009	Task Force Carcinogenicity, ECVAM, Institute for Health and Consumer Protection, European Commission Joint Research Centre, Ispra, Italy.
2004-2005	Task Force IPCS document: “Transgenic animal mutagenicity assay and their use in toxicity testing”, International Programme on Chemical Safety (IPCS), Environmental Health Criteria, W HO, Geneve, Zwitserland.
2006-2008	Endpoint Working Group Genotoxicity and Carcinogenicity of the REACH Implementation Project (RIP) 3.3, phase 2: Development of the Toxicological Guidance Document to Industry on the Information Requirements for REACH.
2006-2008	Scientific Committee on Consumer Products – Working Group on Hair Dyes. Specialized expert. European Commission, Health & Consumer Protection Directorate General; Directorate C – Public Health and Risk Assessment. Brussels, Belgium.
2007-2012	Project committee on the relevance and follow-up of positive results in In Vitro Genetic Toxicity (IVTG) testing, decision trees review subgroup, of ILSI-HESI, member
2009-	Scientific Committee on Consumer Safety (SCCS)– Scientific advisor to the SCCS. European Commission, Health & Consumers Directorate-General (SANCO); Public Health and Risk Assessment. Brussels, Belgium.
2010-2012	Scientific Committee Working Group on Genotoxicity Testing Strategies, Unit of the Scientific Committee & Advisory Forum, European Food Safety Authority (EFSA), Parma, Italy.
2010-	Dutch Health Council, Commission 246, member.
2010-	OECD commission on the revision/archiving of the OECD guidelines for genotoxicity testing. Lead of the “Introduction to the Genotoxicity Guidelines”.

Memberships in Learned Societies:

Presently member in:

1997-	Dutch Environmental Mutagen Society, (Section Genetic Toxicology of the Dutch Society of Toxicology). From 1997 – 2006 secretary of the Dutch EMS.
1997-	Dutch Society of Toxicology. From 2003 treasurer of the Dutch SOT.

Memberships in Editorial Boards:

- In vitro Toxicology
- Environmental Molecular Mutagenesis

List of Publications:

Over 50 publications in peer reviewed papers.

- O'Brien J, Renwick AG, Constable A, Dybing E, Muller DJ, Schlatter J, Slob W, Tuetting W, van Benthem J, Williams GM, Wolfreys A. Approaches to the risk assessment of genotoxic carcinogens in food: a critical appraisal. *Food Chem Toxicol.* 44:1613-1635 (2006)
- Kirkland D, Pfuhrer S, Tweats D, Aardema M, Corvi R, Darroudi F, Elhajouji A, Glatt H, Hastwell P, Hayashi M, Kasper P, Kirchner S, Lynch A, Marzin D, Maurici D, Meunier JR, Muller L, Nohynek G, Parry J, Parry E, Thybaud V, Tice R, van Benthem J, Vanparrys P, White P. How to reduce false positive results when undertaking in vitro genotoxicity testing and thus avoid unnecessary follow-up animal tests: Report of an ECVAM Workshop. *Mutat Res.*628:31-55 (2007)
- Corvi R, Albertini S, Hartung T, Hoffmann S, Maurici D, Pfuhrer S, van Benthem J, Vanparrys P. ECVAM retrospective validation of in vitro micronucleus test (MNT). *Mutagenesis.* 23:271-283 (2008)
- Hernández LG, van Steeg H, Luijten M, van Benthem J. Mechanisms of non-genotoxic carcinogens and importance of a weight of evidence approach. *Mutat Res.* 682:94-109 (2009)
- Thybaud V, Macgregor JT, Müller L, Crebelli R, Dearfield K, Douglas G, Farmer, PB, Gocke E, Hayashi M, Lovell DP, Lutz WK, Marzin D, Moore M, Nohmi T, Phillips DH, Van Benthem J. Strategies in case of positive in vivo results in genotoxicity testing. *Mutat Res* 723:121-128 (2011)
- Dearfield KL, Thybaud V, Cimino MC, Custer L, Czich A, Harvey JS, Hester S, Kim JH, Kirkland D, Levy DD, Lorge E, Moore MM, Ouédraogo-Arras G, Schuler M, Suter W, Sweder K, Tarlo K, van Benthem J, van Goethem F, Witt KL. Follow-up actions from positive results of in vitro genetic toxicity testing. *Environ Mol Mutagen.* 52:177-204 (2011).
- Lynch AM, Sasaki JC, Elespuru R, Jacobson-Kram D, Thybaud V, De Boeck M, Aardema MJ, Aubrecht J, Benz RD, Dertinger SD, Douglas GR, White PA, Escobar PA, Fornace A Jr, Honma M, Naven RT, Rusling JF, Schiestl RH, Walmsley RM, Yamamura E, van Benthem J, Kim JH. New and emerging technologies for genetic toxicity testing. *Environ Mol Mutagen.* 52:205-23 (2011)
- Pfuhrer S, Fellows M, van Benthem J, Corvi R, Curren R, Dearfield K, Fowler P, Frötschl R, Elhajouji A, Le Hégarat L, Kasamatsu T, Kojima H, Ouédraogo G, Scott A, Speit G. In vitro genotoxicity test approaches with better predictivity: Summary of an IWGT workshop. *Mutat Res* 723:101-107 (2011).
- Hernández LG, Slob W, van Steeg H, van Benthem J. Can carcinogenic potency be predicted from in vivo genotoxicity data? a meta-analysis of historical data. *Environ Mol Mutagen* 52:518-528 (2011).
- Adler S, Basketter D, Creton S, Pelkonen O, van Benthem J, Zuang V, Andersen KE, Angers-Loustau A, Aptula A, Bal-Price A, Benfenati E, Bernauer U, Bessems J, Bois FY, Boobis A, Brandon E, Bremer S, Broschard T, Casati S, Coecke S, Corvi R, Cronin M, Daston G, Dekant W, Felter S, Grignard E, Gundert-Remy U, Heinonen T, Kimber I, Kleinjans J, Komulainen H, Kreiling R, Kreysa J, Leite SB, Loizou G, Maxwell G, Mazzatorta P, Munn S, Pfuhrer S, Phrakonkham P, Piersma A, Poth A, Prieto P, Repetto G, Rogiers V, Schoeters G, Schwarz M, Serafimova R, Tähti H, Testai E, van Delft J, van Loveren H, Vinken M, Worth A, Zaldivar JM. Alternative (non-animal) methods for cosmetics testing: current status and future prospects. *Arch Toxicol.* 85:367-485 (2011).

- Zwart EP, Schaap MM, van den Dungen MW, Braakhuis HM, White PA, van Steeg H, van Benthem J, Luijten M. Proliferating primary hepatocytes from the pUR288 lacZ plasmid mouse are valuable tools for genotoxicity assessment in vitro. *Environ Mol Mutagen.* 53:1-8 (2012)