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Professional Profile

Dr. Janet Anderson is a human health toxicologist and risk assessor with over 15 years of experience providing toxicology expertise and consultation to federal agencies, municipalities, and private industry. Dr. Anderson is a Diplomate of the American Board of Toxicology and has held principal and corporate leadership roles at privately- held health and environmental consulting firms before joining Exponent. She specializes in the synthesis of human health toxicology data into regulatory and legislative policies that govern corporate chemical risk management, environmental risk, product stewardship, and public health protection.

Dr. Anderson is an internationally recognized leader in unregulated and emerging chemicals, such as per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane, and microplastics. She works regularly with legal counsel specializing in risk, compliance, and safety related to chemical and product stewardship in various industries, including national security, energy, aerospace, advanced materials manufacturing, technology, and specialty chemicals. She equips clients with the technical foundation to navigate varied governmental and legal actions across domestic and international jurisdictions. She also has extensive experience developing corporate risk management strategies for emerging and legacy chemicals, as well as providing clients with due diligence support concerning potential liability across the full lifecycle of product manufacturing, use, and disposal. She also conducts site-specific risk assessments, including for CERCLA and numerous state-led cleanup sites. With in-depth knowledge of federal, state, and international guidance and policies pertaining to chemicals and human health, she has developed strategies to mitigate potential human health impacts and address associated business risks for both private and public sector clients.

Dr. Anderson is a skilled communicator; she is often an invited speaker at high-level scientific conferences, regulatory meetings, webinars, and community stakeholder meetings. Dr. Anderson also serves as a testifying expert and supports clients in public and private stakeholder engagement. She excels at translating complex risk, regulatory, and public health information to different audiences and stakeholders. With a comprehensive background in evaluating emerging and legacy chemicals' toxic properties across divergent state, federal and international regulatory paradigms, she ensures that scientifically informed processes are utilized in decision-making.

Academic Credentials & Professional Honors

Ph.D., Cell and Molecular Biology, University of Cincinnati, 2007

B.A., Biology, Wittenberg University, 2000

Licenses and Certifications

Diplomate of the American Board of Toxicology (DABT)

Prior Experience

Vice President and Principal, GSI Environmental Inc., Houston, Texas,

Senior Consultant, Integral Consulting Inc., San Antonio, Texas

Emerging Issues and Contaminants Program Manager, Subject Matter Specialist – Toxicology, US Air Force Civil Engineer Center, San Antonio, Texas, 2010 – 2015

Post-Doctoral Fellow, National Center for Environmental Assessment, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, Ohio, 2007 - 2010

Professional Affiliations

Member of Society of Toxicology, Risk Assessment Specialty Section, Women in Toxicology Special Interest Group

Interstate Technology and Regulatory Council (ITRC) Workgroup member

- Per- and Polyfluoroalkyl substances (2017-2022)

- 1,4-Dioxane (2019- present)

- Microplastics (2022-2023)

Water and Health Advisory Council – Council member (2023-present)

Publications

(J.K. Anderson also Published as J.K. Hess-Wilson)

Bowles, K.C., Anderson, J.K., Anderson, R., Bani, B., Barnes, C.M., Brusseau, M., Cousins, I.T., Cushing, P., DiGuiseppi, B., Gray, B. and Higgins, C.P., 2024. Implications of grouping per-and polyfluoroalkyl substances for contaminated site regulation. Remediation Journal, 34(3), p.e21783.

Anderson, J.K., Schneider, D., Knutson, M. and Puchacz, Z., 2023. PFAS Source Differentiation Guide for Airports (No. ACRP Project 02-91). National Academies of Sciences, Engineering, and Medicine, Washington, DC: The National Academies Press. https://doi.org/10.17226/27164

Lafranconi, M., Anderson, J., Budinsky, R., Corey, L., Forsberg, N., Klapacz, J. and LeBaron, M.J., 2023. An integrated assessment of the 1, 4-dioxane cancer mode of action and threshold response in rodents. Regulatory Toxicology and Pharmacology, p.105428

Garvey, G.J., Anderson, J.K., Goodrum, P.E., Tyndall, K.H., Cox, L.A., Khatami, M., Morales-Montor, J., Schoeny, R.S., Seed, J.G., Tyagi, R.K. and Kirman, C.R., 2023. Weight of evidence evaluation for chemical-induced immunotoxicity for PFOA and PFOS: findings from an independent panel of experts. Critical Reviews in Toxicology, 53(1), pp.34-51.

Anderson, J.K., Brecher, R.W., Cousins, I.T., DeWitt, J., Fiedler, H., Kannan, K., Kirman, C.R., Lipscomb, J., Priestly, B., Schoeny, R. and Seed, J., 2022. Grouping of PFAS for human health risk assessment: Findings from an independent panel of experts. Regulatory Toxicology and Pharmacology. 134: 105-226

Fey, M.E., Goodrum, P.E., Razavi, N.R., Whipps, C.M., Fernando, S. and Anderson, J.K., 2022. Is Mixtures' Additivity Supported by Empirical Data? A Case Study of Developmental Toxicity of PFOS and 6:2 FTS in Wildtype Zebrafish Embryos. Toxics, 10(8), p.418.

Guelfo, J.L., Korzeniowski, S., Mills, M.A., Anderson, J., Anderson, R.H., Arblaster, J.A., Conder, J.M., Cousins, I.T., Dasu, K., Henry, B.J. and Lee, L.S., 2020. Environmental Sources, Chemistry, Fate and Transport of Per-and Polyfluoroalkyl Substances: State of the Science, Key Knowledge Gaps, and Recommendations Presented at the August 2019 SETAC Focus Topic Meeting. Environmental Toxicology and Chemistr

Zodrow, J., Vedagiri, U., Sorell, T., McIntosh, L., Larson, E., Hall, L., ... & Anderson, J. (2022). PFAS Experts Symposium 2: PFAS Toxicology and Risk Assessment in 2021—Contemporary issues in human and ecological risk assessment of PFAS. Remediation Journal, 32(1-2), 29-44.

Goodrum, P.E., Anderson, J.K., Luz, A.L. and Ansell, G.K., 2021. Application of a framework for grouping and mixtures toxicity assessment of PFAS: A closer examination of dose-additivity approaches. Toxicological Sciences, 179(2), pp.262-2

Mohr, T.K., DiGuiseppi, W.H., Hatton, J.W. and Anderson, J.K., 2020. Environmental investigation and remediation: 1, 4-dioxane and other solvent stabilizers. CRC Press.

Iwai, H., A.M. Hoberman, P.E. Goodrum, E. Mendelsohn, and J.K. Anderson. 2019. Addendum to Iwai and Hoberman (2014) – Reassessment of developmental toxicity of PFHxA in mice. Internat J Tox. 38(3):183-191.

Anderson, J.K., A.L. Luz, and P. Goodrum. 2019. Response to "Overgeneralization by Anderson et al. and Luz et al. regarding safety of fluorotelomer-base chemistry". Reg Tox Pharm. 105:100-10

Anderson, J.K., A.L. Luz, P. Goodrum, and J. Durda. 2019. Perfluorohexanoic acid toxicity, part II: application of human health toxicity value for risk characterization. Reg Tox Pharm. 103: 10-20.

Luz, A.L., J.K. Anderson, P. Goodrum, and J. Durda. 2019. Perfluorohexanoic acid toxicity, part I: development of a chronic human health toxicity value for use in risk assessment. Reg Tox Pharm. 103: 41-55.

Anderson, J.K., J. Wilhelm, and P. Goodrum. 2016. Emerging contaminants: An analysis of inconsistent U.S. regulations. Daily Environment Report. Bloomberg Bureau of National Affairs. August.

Anderson, R.H., G.C. Long, R.C. Porter, and J.K. Anderson. 2016. Occurrence of select perfluoroalkyl substances at U.S. Air Force aqueous film-forming foam release sites other than fire-training areas: field-validation of critical fate and transport properties. Chemosphere. 150:678–685.

Anderson, R.H., J.K. Anderson, and P.A. Bower. 2012. Co-occurrence of 1,4-dioxane with trichloroethylene in chlorinated solvent groundwater plumes at U.S. Air Force installations; fact or fiction. Integr Environ Assess Manag. 8(4):731–737.

Wang, N.C.Y., Q.J. Zhao, S.C. Wesselkamper, J.C. Lambert, D. Peterson, and J.K. Hess-Wilson. 2012. Application of computational toxicological tools and approaches in human health risk assessment I. A tiered surrogate approach. Regul Toxicol Pharmacol. 63:10–19.

Thomas, R.S., H.C. Clewell, B.C. Allen, S.C. Wesselkamper, N.Y. Wang, J.C. Lambert, J.K. Hess-Wilson, Q.J. Zhao, and M.E. Andersen. 2011. Application of transcriptional benchmark dose values in quantitative cancer and noncancer risk assessment. Toxicol Sci. 120(1):194–205.

Mazur, C.S., J.F. Kenneke, J.K. Hess-Wilson, and J.L. Lipscomb. 2010. Differences between human and

rat intestinal and hepatic bisphenol A glucuronidation and the influence of alamethicin on in vitro kinetic measurements. Drug Metab Dispos. 38(12):2232–2238.

Hess-Wilson, J.K. 2009. Bisphenol A may reduce the efficacy of androgen deprivation therapy in prostate cancer. Cancer Causes and Control. 20(7):1029–1037.

Shah, S., J.K. Hess-Wilson, S. Webb, H. Daly, S. Godoy-Tundidor, J. Kim, J. Boldison, Y. Daaka, and K.E. Knudsen. 2008. 2,2-Bis(4-chlorophenyl)-1,1-dichloroethylene stimulates androgen independence in prostate cancer cells through combinatorial activation of mutant androgen receptor and mitogen-activated protein kinase pathways. Mol Cancer Res. 6(9):1507–1520

Hess-Wilson, J.K., S.L. Webb, H.K. Daly, Y. K. Leung, J. Boldison, C.E.S. Comstock, M.A. Sartor, S.M. Ho, and K.E. Knudsen. 2007. Unique bisphenol A transcriptome in prostate cancer: novel effects on ERβ expression that correspond to AR mutation status. Environ Health Perspect. 115(11):1646–1653.

Sharma, A., E.S. Knudsen, J.K. Hess-Wilson, L.M. Morey, J. Barrera, and K.E. Knudsen. 2007. Retinoblastoma tumor suppressor status is a critical determinant of therapeutic response in prostate cancer cells. Cancer Res. 67(13):6192–6203.

Hess-Wilson, J.K., H.K. Daly, W.A. Zagorski, C.P. Montville, and K.E. Knudsen. 2006. Mitogenic action of the androgen receptor sensitizes prostate cancer cells to taxane-based cytotoxic insult. Cancer Res. 66(24):11998– 12008.

Wetherill, Y.B., * J.K. Hess-Wilson,* C.E.S. Comstock, S.A. Shah, C.R. Buncher, L. Sallans, P.A. Limbach, S. Schwemberger, G.F. Babcock, and K.E. Knudsen. 2006. Bisphenol A facilitates bypass of androgen ablation therapy in prostate cancer. Mol Cancer Ther. 5(12):3181–3190. *Co-first authors

Hess-Wilson, J.K., J. Boldison, K.E. Weaver, and K.E. Knudsen. 2006. Xenoestrogen action in breast cancer: impact on ER-dependent transcription and mitogenesis. Breast Cancer Res Treat. 96(3):279–292

Hess-Wilson, J.K., and K.E. Knudsen. 2006. Endocrine disrupting compounds and prostate cancer. Cancer Lett. 241(1):1–12—Invited review.

EPA Documents

USEPA. 2011. Volume I. EPA's re-analysis of key issues related to dioxin toxicity and response to NAS comments. Final review draft. EPA/600/R-10/038F. U.S. Environmental Protection Agency, Washington, DC. Contributing author.

USEPA. 2010. Provisional Peer-Reviewed Toxicity Values for 1,2-Dichloroethane (CASRN 107-06-2). EPA/690/R- 10/011F. Superfund Health Risk Technical Support Center, National Center for Environmental Assessment, Office of Research and Development, U.S. Environmental Protection Agency, Cincinnati, OH. Chemical Manager

USEPA. 2010. Recommended toxicity equivalence factors (TEFs) for human health risk assessments of 2,3,7,8- tetrachlorodibenzo-p-dioxin and dioxin-like compounds. EPA/100/R 10/005. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC. Coauthor.

Additional Education & Training

Post-Doctoral Fellow, EPA Office of Research and Development National Center for Environmental Assessment, Cincinnati, Ohio, 2007-2010