**Dr. Magda Sachana - OECD**



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**Title of the presentation:**   
Toward a better testing in developmental neurotoxicity: OECD efforts and regulatory considerations

**Abstract:**   
Characterisation of the potential chemical-induced developmental neurotoxicity (DNT) hazard is considered for risk assessment purposes by many regulatory sectors. However, due to test complexity, difficulty in interpreting results and the need for substantial resources, the use of the in vivo DNT test guidelines has been limited and animal data on DNT is scarce. To address challenging endpoints such as DNT, the Organisation for Economic Co-Operation and Development (OECD) chemical safety programme, has been working lately towards the development of integrated approaches for testing and assessment (IATA) that rely on a combination of multiple results from different methods (e.g. in vitro, in silico and non-mammalian in vivo models) that are supported by mechanistic knowledge organised according the adverse outcome pathway (AOP) framework. In 2017, the OECD convened a dedicated OECD expert group to develop a guidance document on the application and interpretation of data derived from a DNT testing battery that relies on key developmental processes and is complemented by zebrafish assays. This presentation highlights the main milestones achieved since the launch of the OECD DNT project and explores the contribution of experimental data and case studies to the development of the guidance document. Finally, the audience will be informed about the efforts to increase regulatory uptake of the DNT *in vitro* battery of assays.

**Short bio:**

Dr Magda Sachana is an Administrator within the Environment Health and Safety Division of the OECD’s Environmental Directorate since 2015. She manages the development and implementation of policies in the field of chemical safety and contributes to the OECD Test Guidelines, Pesticide and Hazard Assessment Programmes. Dr Sachana among other projects is managing the OECD project on the *in vitro* battery for developmental neurotoxicity since 2017.