

## **Facing (and overcoming) exposure assessment challenges in studies on water pollution and cancer**

### **Co-chairs:**

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**Aim and short description:** Studies evaluating cancer risk related to water pollution face multiple challenges in exposure assessment. Some of these are specific for cancer, such as long-term exposure windows, lack of historical data on environmental levels and lack of biomarkers of chronic exposure. Others are typical for the evaluation of water pollutants: complex mixtures, multiple exposure routes, small effects, etc. This symposium will include 5 presentations on different water contaminants, cancer sites, study settings and methodologies, with a particular focus in the exposure assessment and some new results.

### **Presentations:**

1. Drinking water contaminated with perfluorinated chemicals – The use of modelled and measured serum concentrations in epidemiological analyses.  
**Speaker:** Tony Fletcher, Nicola Fitz-Simon, Bernd Genser, Scott Bartell, Hyeong-Moo Shin, Veronica Vieira, Ben Armstrong
2. Exposure assessment approaches for nitrate ingestion  
**Speaker:** Mary H. Ward, John R Nuckols, Sonya Heltshe, Briseis Aschebrook-Kilfoy, Curt Dellavalle, Peter Weyer, Bernard T. Nolan, Charles Lynch
3. Exposure assessment approaches for arsenic in drinking water  
**Speaker:** John R Nuckols
4. Breast cancer risk and tetrachloroethylene-Contaminated drinking water in cape cod, Massachusetts: a reanalysis of case-control data using GIS, residential histories, and a modified exposure assessment  
**Speaker:** Lisa Gallagher, Verónica Vieira, David Ozonoff, Thomas Webster and Ann Aschengrau
5. Disinfection by-products and colorectal cancer in Spain  
**Speaker:** Cristina M Villanueva, Nuria Aragonés, Itziar Zaldua, Estefanía Toledo, Adonina Tardón, Antonio José Molina, Concepción López Rojo, Esther Gracia-Lavedan, Marina Pollán, Manolis Kogevinas
6. Summary and Discussion  
**Chaired by:** Cristina M Villanueva, Margaret Karagas, John Nuckols