



## CONNECTING PEOPLE AND SCIENCE IN A POST-TRUTH WORLD

Joan C., a gerontologist at a seniors' residence, was let go because she refused to be vaccinated against the flu. Seniors are particularly susceptible, and therefore benefit from [herd immunity](#). Joan's reason? She was afraid of thimerosal, an antifungal preservative derived from mercury, used to prevent contamination in some vaccines where the vial is used for multiple patients. To her, mercury is a poison. Period. But a vaccine

containing 0.01% thimerosal contains 50 micrograms of thimerosal per 0.5 mL dose, or ~25 micrograms of mercury per 0.5 mL dose. In other words, about the [same amount of elemental mercury as in a 3 oz can of tuna](#)—which she would probably consider harmless. The MMR (measles, mumps, rubella) vaccine suffers from a similar type of vaccine hesitancy. Some people believe it causes autism. Although the myth has been [disproven](#), it refuses to die thanks to [websites](#), [social media](#), and [celebrities who are unqualified to speak](#). As a result, preventable measles outbreaks are becoming more frequent, and the [flu kills ~3,500 Canadians/year](#).

Opinion and emotion dominate evidence are also common in agricultural technology (eg: gene editing, glyphosate), climate change, and food (eg: gluten, fad diets). General science is not immune either (eg: flat Earth, moon landing conspiracy, placenta-eating, homeopathy).

How can science communication prevail in the face of misinformation, mistrust, cognitive bias, celebrity culture and other barriers?

### This workshop

Using examples ripped from the headlines, this one-day workshop (or series of webinars) provides practical learning on the rise of misinformation in science, what makes people vulnerable to it, and concepts and strategies to develop more effective messaging. Participants will analyze situations and discuss potential counter-balancing solutions through exercises, case studies, discussions and critical analysis that help bring the learning to life and into the workplace.

### Key outcomes

- An understanding of the social psychology behind counter-knowledge.
- New approaches, tools and ideas to improve messaging and avoid post-truth pitfalls.

### Audience

Anybody who has to communicate science to those affected by post-truth or obtain buy-in for evidence. Examples include government and academic scientists, policy makers/analysts, knowledge brokers, health care providers and administrators, post-graduate students, science communicators, journalists, health charities and others.

### Instructor

Sylviane Duval grew the science communications business she launched in 2003 into a consultancy focusing on knowledge transfer, research navigation, and business/soft-skills training for scientists. Working with clients in a wide range of sectors has given her a first-hand opportunity to observe many polarized discussions, understand the basis for entrenched beliefs and contribute ideas to balanced solutions so that end users can make informed decisions. Sylviane is a Co-founder of the Institute for Knowledge Mobilization and member of Evidence for Democracy's Network of Experts. She sits (or sat) on national and international boards supporting the ethical and accessible communication of science, and a national advisory committee promoting the protection of intellectual property. She holds a Secret clearance from the Government of Canada.

Listen to Genome Alberta interview Sylviane about the workshop [here](#).

**Contact us today to book your workshop/webinars.**

[www.openthebox.ca](http://www.openthebox.ca) ♦ 613 537 2728 ♦ [syl@openthebox.ca](mailto:syl@openthebox.ca) ♦ [training@openthebox.ca](mailto:training@openthebox.ca)