



3:30pm – 5:00pm

# The status of science literacy in Canada

*Panel Organizer: Maurice Bitran  
Ontario Science Centre*

# **The status of Science Literacy in Canada**

Canadian Science Policy Conference

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# Panelists

- Dr. **Mona Nemer**, Chief Science Advisor, Government of Canada.
- Dr. **Molly Shoichet**, University Professor and Canada Research Chair, University of Toronto.
- Dr. **Eugenia Duodu**, CEO Visions of Science Network.
- Dr. **Maurice Bitran**, CEO and Chief Science Officer, Ontario Science Centre.

# Definitions

- **What is Science Literacy?**
  - “The ability to engage with science-related issues, and with the ideas of science” (OECD – PISA)
- **What does it include?**
  - Knowledge of scientific information
  - Knowledge of the scientific method
  - Attitudes towards science

# Canadian Science Literacy Surveys

- The Council of Canadian Academies – 2014
- Ontario Science Centre Surveys – 2016, 2017 and 2018
- The Full 2018 survey is available in the Ontario Science Centre's web site (under about us, media room)
- [https://www.ontariosciencecentre.ca/Uploads/AboutUs/documents/Ontario\\_Science\\_Centre-Science\\_Literacy\\_Report.pdf](https://www.ontariosciencecentre.ca/Uploads/AboutUs/documents/Ontario_Science_Centre-Science_Literacy_Report.pdf)

# OSC's 2018 Science Literacy Survey

- The good news:
  - 74% agree that we will need science and technology to solve the problems we face
  - 83% want to know more about science and technology
  - 84% agree that science and technology improve our lives
  - 90% trust museums, science centres, and scientists to deliver accurate information

# OSC's 2018 Science Literacy Survey

- The bad news:
  - 27% of Millennials believe that there is a link between vaccinations and autism
  - 47% believe the science behind global warming is still unclear
  - 54% believe society is turning away from science
  - 73% believe “fake news” are affecting their knowledge of the world

# OSC's 2018 Science Literacy Survey

- Anxiety about the future:
  - A majority of Canadians are concerned about the societal impact of new technologies:
    - 62% concerned about Artificial intelligence
    - 60% concerned about Self driving cars
    - 54% concerned about the internet of things



# **A “Community Science Capital” approach to increasing Science Literacy in Canada**

- Emphasize science and technology in everyday life
- Emphasize the scientific method as a tool to understand nature, solve everyday problems, and critically analyze information
- Take a life-long approach to the relationship between the population and science and technology
- Recognize and support the role that each community actor (families, schools, universities, museums, science centres, science education networks, research institutes) plays in that relationship
- Coordinate strategies and efforts among community actors