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**How the Culture and Structure of Science Might Change to Address Grand Societal Challenges?**  
Organized by: Tina McDivitt, Spindle

Speakers: Gordon Kurtenbach, Head of Autodesk Research, Autodesk; Amy Lang, Director of Patient, Caregiver and Public Engagement, Health Quality Ontario; Donald Stuss, Founding Director, Baycrest’s Rotman Research Institute founding President and Scientific Director, Ontario Brain institute

Moderator: Mark J. Poznansky, President and CEO, Ontario Genomics  
  
**Takeaways and recommendations**

Convergence and trans-disciplinary research

* Trans-disciplinary research is emerging as a result of people being trained in multiple disciplines, and the convergence of engineering, life sciences and physical sciences.
* Public, professional and commercial stakeholders are needed to define the scale, scope and foci of research.
* Support should be provided to areas of research where Canada can have a competitive advantage.

Improving clinical diagnosis

* Diagnoses need to be made in terms of clinical sub-syndromes: a systems approach, which will ensure the use of correct target candidates in clinical trials and improve their efficacy.
* Put the patient in the centre: integrate all aspects that are relevant to maximizing patient benefits.
* Embed research into clinical practice and embed commercialization into research.

Technological platforms

* Bridging technology platforms allows the application of new scientific knowledge to scientific and industrial processes.
* It is critical to support interdisciplinary connections and make working with disparate datasets easy.
* Platforms allow for a systems approach, which is needed to address complex global challenges.

Engaging patients and caregivers in healthcare policy

* Effectively engaging patients and their caregivers can have a positive impact on many aspects of the patient’s healthcare.
* Patient and public participation in health policy, service design, and governance can lead to better-informed and more sustainable decisions and programs.
* Engaging patients can change the way different kinds of evidence are weighted in decision-making for health policy.