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**The Scientific and Economic Benefits of Open Science**

Organized by: Arij Al Chawaf, Structural Genomics Consortium and Annabel Seyller, Tanenbaum Open Science Institute at The Montreal Neurological Institute

Speakers: Elizabeth Edwards, Professor, Department of Chemical Engineering and Applied Chemistry, and Cell and Systems Biology, University of Toronto; Lizabeth Leveille, Associate Vice President and Head, Boston Innovation Hub BD&L, Merck Research Laboratories; Dr. Rémi Quirion, Chief Scientist of Quebec; Guy Rouleau, Chair of the Department of Neurology and Neurosurgery, McGill University

Moderator: Aled Edwards, CEO, Structural Genomics Consortium

**Takeaways and recommendations**

* The panel focused on open science for earlier stage research, while recognizing that patents are still necessary at the later research stages.

**Open science is economically beneficial**

* People often intuitively feel that open science is socially beneficially but many don’t realize that it is also good for business.
* There is no evidence that patents lead to innovation, unless “number of patents” is a legitimate metric for innovation.
* Open science builds trust between industry and academia; it creates an opportunity for more brains to work on a problem; it helps data be more reproducible; and it allows knowledge to be rapidly taken up by a variety of industry players.

**How can Canada lead and create impact from Open Science?**

* Canada is already leading in many areas of open science.
* Open science is a significant cultural shift for people in academia and industry; government needs to promote and reward it.
* Subsidize researchers who want to publish in open access journals.
* Government should fund science for the betterment of humanity, not for economic development.
* Reconsider the emphasis research grants place on patent strength.

**Working together means finding solutions faster**

* Industry should use open science to collaborate on problems they cannot solve on their own.
* Academics are incentivized to innovate and there is less emphasis on reproducibility as industry would define it. Working together with industry strikes a good balance.
* Open science is particularly useful for rare diseases no one is investigating; it’s important for industry to get involved because of their expertise in drug development.