



SPEAKING REMARKS

FOR

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CANADIAN INSTITUTES OF HEALTH RESEARCH

FOR

**CULTURAL KNOWLEDGE AND THE HEALTHY
SOCIETY: A RESEARCH**

& INNOVATION SUMMIT

ONTARIO COLLEGE OF ART AND DESIGN

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Opening

- Good evening.
- Thank you Sara for your kind introduction and for the invitation to take part in this summit. Please accept my apologies for not being here yesterday.
- My congratulations to the Ontario College of Art and Design (OCAD) for organizing this gathering.
- I'm very excited at the prospects of what we stand to achieve during this groundbreaking event.
- There is much to discuss about ways to bridge the gap between culture and science to create new knowledge that contributes to a healthier society.

- Let me begin my remarks by sharing with you a few questions that I have been considering.
- Questions that, I think, are pertinent to this summit.
- For instance: how do we collect information about subjects that are difficult to talk about?
- Take mental illness. If words fail us and stigma throws up barriers, what alternatives can we use to express and record ideas?
- What about human health? Years of research has generated a great deal of knowledge about what's bad for us. So why is it so hard to change human behaviours that contribute to poor health? Could there be effective ways of reaching people that we simply haven't found yet?

- What media and methods can we use to communicate scientific information to health care practitioners and non-scientific audiences, such as decision-makers, the public and patients?
- We have mapped the human genome. Now we're starting to define human disease with the same precision. What tools can we use to visualize and make sense of this new knowledge? Are there other means of helping define and manage disease?
- These are all questions that health researchers are trying hard to solve.
- But I would also bet that, to many in this audience, they sound like challenging design and communications projects.
- If so, that would be very good.

- Because it demonstrates something health researchers already *do* know.
- And that is: the broader the expertise that we can bring to bear on the search for new knowledge, the richer the insights that are possible, and the more likely we can translate this knowledge into tangible impacts.
- Tonight I'd like to contribute to the discussion by explaining what the Canadian Institutes for Health Research, or CIHR for short, are doing to bring together diverse disciplines, approaches and activities that will result in better health and healthcare.
- Equally important I'd like to describe a few areas where we could definitely benefit from the research and creative input of members of the arts community, be it designers, curators or

- In doing so, I'm inspired by a useful piece of advice that designer Bruce Mau describes in his wonderfully broad Incomplete Manifesto.
- He says when people from diverse disciplines collaborate they must be encouraged to listen carefully to one another.
- By listening to others express what they need, desire or wish to achieve, Mau says we fold their world into our own with the result that both parties are forever changed.
- Well I'd like to assure you that we in the health research funding community are listening.

- But before I say more on that topic, I've been asked to tell you a bit about CIHR.

CIHR

- CIHR was established nine years ago to reinvigorate health research in Canada.
- Previously, health research was funded by the Medical Research Council, which supported mainly biomedical research.
- CIHR took a different approach and was given the mandate to invest in research that looked at the entire range of health determinants.
- CIHR's objective according to the CIHR Act is to excel according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective

- CIHR supports research that falls into four broad categories:
 - Biomedical;
 - Clinical;
 - Health systems and services; and,
 - Population and public health.

- The creation of CIHR also involved another innovation. We created a network of 13 virtual institutes to bring together researchers from different disciplines, sectors and regions to focus on major challenges.

- For example, the CIHR Institute of Aboriginal Peoples' Health addresses health issues specific to Canada's Inuit, Métis and First Nations communities; while the CIHR Institute of

- The virtual nature of the institutes, each has a scientific director located at different universities across the country, is unique and well suited to the vast size and diversity of Canada.
- This model has helped overcome the barriers of time, distance and geography. We have been successful in creating dynamic research communities addressing a wide range of issues.
- Using this model, we have been able to build highly talented research teams focusing on important research issues, such as obesity, aging, regenerative medicine, mental health in workplace, palliative care for cancer patients and HIV/AIDS research to name but a few.

- We also put an emphasis on establishing links and partnerships with the voluntary health care sector, other government agencies and industry.
- CIHR now invests close to \$1 billion/year in health research being carried out by some 13,000 researchers working in hospitals, universities and other research centres across the country.
- These researchers tap into a mix of funding targeted to strategic initiatives and funding for open, investigator-initiated research.
- Each funding application first undergoes a rigorous peer review to ensure that it meets internationally accepted standards of excellence.
- The research we fund is improving Canadians' lives. It is helping prevent, diagnose and treat

Knowledge Translation

- Translating research is also an important part of our mandate and makes CIHR somewhat unique in the world.
- Knowledge translation, or KT for short, is the term we use to describe activities that involve making appropriate and relevant end users or knowledge users aware of knowledge or innovations and facilitating their use of them.
- It's also about closing the gap between what we know from research and what we do by turning knowledge into action.

- Knowledge translation certainly occurs at the end of a scientific process – often known as dissemination.
- But we also see that knowledge translation can be intrinsic to the research process itself- we call this approach integrated knowledge translation and it is a different way of doing research. It is about participatory or collaborative research and is action and solutions focused. I believe it is very akin to participatory design.
- For example, with IKT we encourage researchers and knowledge users to collaborate early to jointly identify research issues or questions.
- Ongoing, integrated knowledge translation provides many benefits:

- Together, researchers and knowledge users better contextualize and interpret the findings.
- And keeping everyone in the loop from the beginning increases the likelihood of adoption of the findings when they become available.
- Perhaps most importantly, IKT approaches foster knowledge exchange and mutual learning by researchers and knowledge users.
- The end results of such an approach are more effective health services and products, a strengthened health care system, and ultimately, better health for Canadians.

Research and New ways of seeing

- No matter what your area of expertise, one of the challenges is the fact that knowledge is only as good as one's tools.

- Breakthroughs are often accompanied by the need to develop new models or new ways of seeing or communicating to make the best use of the data.
- But these new ways of seeing can be seductive. They can lead us to think we have reached the end of knowledge when we are merely at a way station.
- That point is made in an article in *the New York Times* that described how disease has been redefined over time.
- The author traced the trajectory of how we classify disease, starting back in the 18th century when the Swedish scientist Linnaeus placed diseases in categories based on symptoms.

- A century later, our knowledge grew when researchers began peering into the body to observe and measure physiological changes.
- For instance, the stethoscope, used to measure heart rate, was developed in the 19th century.
- Today, our ability to study genes has allowed us to redefine disease again, this time with great precision.
- And once again, we have changed our way of seeing.
- Now, the instrument of choice is the computer. Researchers today look for knowledge by slicing and dicing data.

- Yet, what is to say that the collaboration between a bioscientist and a computer engineer is the end point for using digital information?
- Perhaps artists working in digital media could expand our ability to see, to understand and to analyze. Perhaps these new perspectives will also raise new research questions and new ways of conducting and understanding the implications of research.

Early successes

- To date, CIHR has placed a focus on integrating the different disciplines involved in health research.

- But, as we learn more about the nature of creativity and innovation, we begin to see the advantages of extending that focus to include design, the arts and the humanities.
- And, I'm pleased to say that we're beginning to see small steps in that direction.
- Take for example, the work of Dr. Katherine Boydell, a sociologist and senior scientist at Sick Kids.
- Recently, she turned to a choreographer and a dance troupe to help her trace the pathways to mental health care for young people suffering a first episode of psychosis. Some of Dr. Boydell's work has been funded by CIHR and we will continue to fund work of this sort and would encourage applicants like you in the audience to

- Dr. Boydell says she chose the medium of dance for her work because of its power to communicate.
- The dance is based on extensive research.
- It also reflects Dr. Boydell's findings that young people's search for mental health care is not a linear path but more like a topographical map.
- *Hearing Voices*, as the dance is called, has been staged at grand rounds at Sick Kids and shown to high school students.
- It has also been praised for its power to communicate the nature of psychosis.

- By this example I hope you can see how dance can be a powerful technique for transferring knowledge and research results to potential audiences.
- From a KT perspective there is much work to be done to study the effectiveness of photography, poetry, drama and theater productions, video, and even animation for example, in disseminating and facilitating the uptake of research findings by specific audiences. KT Science is the study of interventions to influence the uptake of knowledge and work such as this can contribute to KT Science if researchers can evaluate its effectiveness.
- You may not be aware but CIHR has numerous funding opportunities that support this type of research and CIHR welcomes social science and humanities researchers. Please consider applying to us if the focus of your research is

- In addition to breaking down the barriers between disciplines, we want to break down the barriers between the health research community and the people who benefit from health research.
- To help open the lines of communication between these two communities, we created our Café Scientifique program. The summit is hosting three of them. At these Cafés, researchers and members of the public typically gather in restaurants, bars and auditoriums to discuss

- These Cafes are not lectures. They are open discussions with a dual purpose: to help inform the public about research and to help inform researchers about the public's questions and concerns.
- Once again the emphasis is on active, open exchange of ideas and mutual learning. And we never know where ideas will lead until we act on them.

Conclusion

- For almost a century, Canadian health researchers have made discoveries that have led to the eradication of disease and the promotion of human health.

- By broadening the expertise we can devote to the search for knowledge and the quest for innovation we stand to gain far richer insights and to accelerate discoveries.
- The worlds of art, design, communications and other creative realms have much to contribute to health research and KT. Of that I am sure.
- I am also sure that we have only begun to scratch the surface.
- We will make great progress if we observe two important points.
- The humility to realize that there is still much to learn. And, openness to new ideas and new avenues of inquiry. Third – you must apply.
- While it is difficult to predict the future, I believe collaboration between science and the arts has

- Events such as this summit are important in helping us to begin to explore this together.