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# Public Funding for the Future

An interview with Professors
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## What is the long-term value of public funding for research?

We all understand that science has led to major changes in the way we live day to day, and in the general well-being of society. But it's almost never done so with that aim originally in mind. Science can be turned into practical applications, but only by valuing the science itself at the same time, by thinking of it as a creative endeavour which will lead to unanticipatable discoveries that may then turn into the next computers, or the next spaceships, or the next Tang, or whatever the benefits of the space race have actually been.

## What does public funding look like right now?

There's a great system in Canada today, where when we partner with companies, when we go after goals that can have industrial impact, that can lead to products, that can lead to new services, the federal government provides very strong support of this applied research. And so it should – it's very powerful. But we also have to always keep in mind that the opportunities for revolutionary, disruptive, applied research come from basic research. And the government does invest in basic research and it's really important to sustain and even grow the investment in basic research, because the transformative potential of applied research on society and industry is only enabled by feeding the pipeline through the basic work.

## How has funding public research paid off in the past?

We are using technologies and science and chemistry that was developed in the 1940's and '50s right now to be able to manufacture molecular imaging probes in ways that were never possible. So this is fundamental science that had no immediate application 30, 40, 50 years ago, but is now having impact. To develop new technologies that don't have an immediate application, creates a continuum of time so that people have a toolbox to solve problems.

So what you don’t want to do is empty that toolbox and not have anything available to solve the problems of the future. So having that balance of applications from today from the knowledge you know, and creation of an armament of new ideas that can solve new problems I think is cool.