



The All-Science Challenge: Dr. Peter Hackett

> **May 9, 2009**

> **Location: University of Calgary**

Well, that was an exciting day! Before I continue, I would like to congratulate all of you on a wonderful competition. Please give yourselves a big hand!

One of the things that excites me about being here today is I get the chance to spend a little time with these great students, their parents, their teachers and mentors, and all the fabulous volunteers here. All of these groups are important to me, but let me say a few words today just to the students.

You should all know that you stand at a point in your lives when you can change the world. More so now than ever, is the world's prosperity tied to the potential of our youth – students like you. And how are we going to achieve that potential? By focusing on areas which will make the biggest impact. And I hope as you saw today, one of these areas will be in science.

Science has the potential to unlock doors that many thought we could never open. It's going to give us medicines to save the sick, technologies to make our lives better, and opportunities to do things that we probably never even thought of.

The road to a prosperous future is not easy, and there are a few things you will need to know to be truly successful in sciences. Think of it as a recipe, and here are some key ingredients to success.

Competition is healthy. For those of you who have seen Seinfeld, you may recall a scene where George goes to La Guardia and gets on the moving walkway in the terminal. Later on he tells Jerry in that very intense way he had: "Now when I walk on the sidewalk – I just feel cheated!"

Beware of entitlement. It starves aspiration. At Ingenuity, we try to guard against entitlement in all its forms believing that healthy competition makes the innovation system stronger. Competitions like today's event.

The next ingredient for success is risk-taking. Each time that I see one of you on a skateboard, skating backwards, whistling, with your eyes closed, I know that you believe that risk taking is not a bad thing. You don't see many adults doing that. But that's the key – doing things that are considered risky makes you all that much better.

And if you don't see many adults skateboarding on the sidewalk, then I'm guessing you see even fewer adults participating in events like the X-Games. That is because it takes another ingredient of success to be good enough for the X-Games – innovation. Yes, you need to take risks when doing jumps, but you also need to be able to dream up new tricks which have never been done. That's when you get the true WOW factor.

It's never easy to articulate what it is exactly you need to know to be successful in sciences. But let me tell you, there are many examples of what you can achieve when you put those ingredients of success together.

Who here in the audience has an iPhone? If you're like the majority of iPhone owners, you probably use it to listen to music, take pictures, or to play games. But here at the University of Calgary, Dr. Ross Mitchell envisioned another way of using the technology. He, along with fellow researchers, developed software for the iPhone that allows doctors to remotely receive medical images of their patients, and manipulate the images in three dimensions. This type of research will greatly impact how quickly a patient can be diagnosed – possibly saving their life. When cell phones first started coming out, I'm sure not many people had the vision necessary to see that cell phones had that kind of potential.

I'd like to leave the students with one more image – and that is the big wave, Peahi or “Jaws”, a triangular reef off the North Shore of Maui. Peahi breaks sixty feet high and when it does people surf on it! Excellence is clearly defined at Peahi, only the excellent survive. Entitlement does not take you far but that is not my point. It takes risk taking to surf Peahi. That is not my point. It takes skill and innovation to surf Peahi - before the invention of tow-in surfing in 1998 it was simply impossible to surf there. That is not my point either. This is my point: the waves at Peahi are born near Alaska and they take days to travel to Hawaii. Along the way, they are tracked by

buoys uplinked to satellites and the web. The surfers know when the waves will arrive and they come to Peahi just when sixty feet waves are breaking. That is my point. We know the waves are coming. People at Alberta Ingenuity come to work every day for just one thing – to prepare Alberta’s society for those waves so that Alberta’s competitors, risk takers, and innovators can take the ride of their lives - powered on by the boundless ocean of human ingenuity. And so, at this time, it is my great pleasure to introduce today’s winners – students who have shown they have what it takes to be stars.

(Awards Presentation)

Thanks everyone, and congratulations to all our winners!