



# RESEARCH2REALITY

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## Creative Minds Will Take VR to the 'Next Level'

An Interview with **Robert Allison**, Virtual Reality Scientist  
York University, Vision: Science to Applications (VISTA)

The lines between reality and virtual reality will become increasingly blurred. I think technology is steamrolling ahead. The technical advances are going to be there. It's really up to us to see what we're going to be able to do with them.

When we look at the world, we get images on our retinas. If we don't move around, it's static. If we move around, of course, it's moving. We need to take this information that comes into our eyes, in some sense it's kind of impoverished, and we need to then go and build the world around us so that we can act in the world, we can understand the world, and we can relate to the world.

### How does your work impact visual media like film?

Right now we're doing a bunch of research that is very interesting to us. We're working very closely with companies, looking at trying to develop algorithms for compressing images into advanced displays. This is going to enable next-generation virtual reality devices, so it's a very exciting current project we're working on.

Understanding the human aspect of human-display interaction is very important. Technology itself is obviously necessary but not sufficient in order for us to get these better experiences.

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So we had a large project here called 3DFLIC, which involved York University researchers, companies in the film industry in Toronto, and the goal was to try and integrate science into the 3D creative process. If we have an understanding of the human side of this equation, then we can make much more compelling content, we can make better engineering decisions in terms of trade-offs - there's always trade-offs in designing displays and display systems.

What's really going to take VR to the next level, I think, is creative minds. I think technologists need to enable the creatives to take this and then say, you have an entire new medium, a new palette you can paint experiences with. And if we do our jobs right, as technologists, scientists that are building this, this will give an incredible set of tools for people to do things that are different. Just like cinema was completely different to anything that came before it.