Q&A with James Piercy

Interviewed by Joelle Seligson

In January 2011, science communicator James Piercy was involved in a devastating car crash that took his wife's life and left him with a serious brain injury. In the four years since that tragic day, Piercy has begun delivering science talks again—this time, from the vantage point of his own experience. Through Science Made Simple, based in Cardiff, Wales, Piercy travels throughout the United Kingdom and overseas to present "What's Going on in His Head?"—a talk in which he draws on his own injury to educate audiences about the brain.

James, tell me a little bit about your journey from January 2011 to today.

A long journey, really. At the end of January 2011 I was involved in a serious car accident and had a serious brain injury. I was in hospital for about two months, I was off work for six months, and very slowly getting back into doing things. As part of my journey of recovery, I stood up and gave a presentation to colleagues about what had happened to me and things that I had learned along the way. And that was very well received so I thought, "Hey, I should do more of this. Maybe it would help other people kind of understand what brain injury is all about. And if I can do anything I can stand up and talk to people; that's what I've been doing for 20 years." So with help from the Wellcome Trust, over in the UK, I put together a presentation about my brain injury and the wider impacts of it, and I've been presenting that across the UK and overseas.

What did you do before the accident and what's a day in the life for you now?

I worked for Science Made Simple before the accident. My job largely involved giving science demonstration shows to school groups, mostly high school–aged children but across a wide range of different science topics. Before that, I was in a very small science discovery center, running the education program there. And a typical day now, I'm doing quite a bit of project management work, but I'm also quite heavily involved in science communication training. So actually tomorrow I fly

to France, where I'll be working with some scientists working in biodiversity and sustainable agriculture and teaching them how to effectively talk about their work.

So how do you effectively talk about your work? What does your presentation entail?

The presentation kind of takes a chronological view of my story, starting from what happened on that awful day to where I am now, and really picking up the physical changes that happened to me as a result of the accident and the impacts that they have on everyday life. The main thing to come out of it, I think, is that I've been incredibly lucky. I could've been much, much more severely affected by the injury than I have been, and my consultant tells me that my recovery is phenomenal. Why that is [laughs], who knows? Luck. But it seems to me that because I have made such a good recovery I kind of almost have a duty to share what I've learned and help people understand about this huge problem across the world. Brain injury affects millions of people every year.

So what do you hope that an audience at one of your shows comes away with? What's your mission?

I guess my mission to increase a bit of understanding and awareness of this problem. So if people could go away thinking, "Wow, that's major, I'm going to be a bit more careful now, I'm going to put my seatbelt on, I'm going to wear my cycle helmet when I go out because I realize what can happen. And if I meet somebody who's suffered this kind of thing, I perhaps won't be so quick to judge them." It's quite common for people to have changes in their behavior. They might behave as if they're drunk sometimes. And it's not because they have an alcohol problem, it's because they have a brain injury. So I hope to give a better understanding. The other thing I've found is that quite a few members of the audience have suffered an injury to their brains themselves, or they know someone who has. And what they take away is that somebody else understands what it's like, and that's a hugely powerful thing.

What kind of tactics do you use in the presentation to get this story across?

We have some laughs. I think it's really important to be able to laugh about things. So there's a few jokes, I know it sounds unlikely, but

there are a few jokes. It's quite different from other science presentations that I've done in the past. They're about demonstrating some kind of scientific phenomena, a "wow" moment. Now it's just me talking, really. I show some pictures, I have all these medical images that were taken of me at the time, when I was in hospital, so I can show pictures of my brain and we can see the areas that have been affected. But largely it's just me telling my story, and that's a really powerful way to connect with audiences, I think.

Right, that personal approach.

Yeah, that sort of first-person thing. You know, I'm not talking about brains; I'm talking about *my* brain.

Right. What kind of effects did the accident have on your brain?

I suffered quite a lot of damage to the left hemisphere of my brain, which left me a weakness on the right-hand side of my body. It's much improved now, but if I get tired, it'll be coming back. So I kind of lost the sensation, lost proprioception, so my awareness of where the right-hand body was. It was a problem for a while. The biggest problem I have is fatigue, still. I get very tired. And when I'm tired, my speech might be affected, my gait, my walking can sometimes be a bit funny too. I just have to be careful, I have to plan what I'm doing quite carefully. I have to be very careful about monitoring my time so I don't push myself too hard. And really kind of get used to not being able to do all of the things that I used to do in the past.

Along with maybe looking at someone and thinking they're intoxicated versus having a brain injury, what are some other common misconceptions about brain injury that you've seen?

Sometimes there is an association with mental illness. Some people can have psychiatric effects, it changes their mood and behavior, loss of inhibition, for example, from damage to the frontal lobe of the brain is quite common. So people might think that people are mentally ill, they might think that they're stupid, and actually often that's not the case. There may be some kind of damage in some cases, but for the most part people can do all the things that they used to be able to do, they're just a bit slower now. They find things a bit harder to do.

How do you think science centers and museums, how could they help educate their audiences about brain injury?

I think what's really interesting for people that work with broad audiences and talk about science is that the brain is a fascinating and quite poorly understood thing. We all know that it controls everything that we do and think, but how? How does that work? There's some fascinating cutting-edge research going on in neuroscience about understanding the brain and how it operates, and the effects of damage to the brain are actually a key way in, to try to understand how things work. If we look back to someone like Phineas Gage, who worked the railroads and ended up with a metal spike through his head, we learned a huge amount about the function of the front part of the brain by looking at cases of people like him. So I think for people who are reading *Dimensions* and working at centers and thinking of new ways to connect to audiences, think about what you can do about neuroscience and brain research, but also more generally, how can you use the first-person approach to connect with audiences? Kind of like what I've been doing, telling my own story. Are there stories amongst the staff in the center that we can get across and make a real strong connection to other people?

This interview appeared in the January/February 2015 issue of Dimensions *magazine, published by the Association of Science-Technology Centers,* www.astc.org.