



## **The Open University Worldwide**

*Research at the Open University*

### **John Zarnecki**

To me research in some senses embodies what we are as human beings. We have this innate curiosity, which we can't suppress. We want to know what is beyond the cave. What is over the next hill? What is across that river? What is across the ocean? And research is perhaps a formal way of describing that innate curiosity and excitement.

### **Hazel Rymer**

Well research in a University is absolutely critical. You can't teach people at University level if you aren't there and working beyond it yourself.

### **Brigid Heywood**

We're certainly well known around the world and possibly on a couple of other planets for our expertise in earth sciences and the particular expertise we've developed in planetary exploration.

### **John Zarnecki**

I build scientific instruments and I send them into space. I suppose I'm fundamentally interested in the origin and the evolution of our solar system.

### **Hazel Rymer**

What I do is try to understand how volcanoes work. I try to understand what happens before a volcano erupts because obviously that's quite important for the people who live nearby and it's important for the environmental consequences.

### **Voiceover (on film)**

We have ignition and lift off of a Delta 2 rocket clearing NASA on an odyssey back to Mars.

### **John Zarnecki**

One of the instruments that we developed here at the Open University called the Beagle project that went to Mars was what is called a mass spectrometer. That's an instrument that analyses with great precision the composition of in this case the atmosphere of Mars. What we had to do was shrink it to make it about the size of a shoebox and to make it extremely rugged. Now it turns out that an instrument like that developed for Mars has potential for very practical uses on Earth.

### **Brigid Heywood**

Research for research sake is clearly very exciting to academics. But we're funded to undertake research, which adds value to society and economy.

### **John Zarnecki**

And in fact we're working with funding at the moment to develop this instrument for detecting tuberculosis, which of course is one of the great killers in the world today, with our instrument there is the possibility that you can use it in the field to do an analysis on the spot and look for the telltale signs of tuberculosis. That has enormous implications.

### **Brigid Heywood**

What we seek to do is align projects that are of benefit to the mission and purpose of the University with those charitable bodies and organisations prepared to invest research funds.

**Hazel Rymer**

Many of the potentially nastiest volcanoes are in the poorest parts of the world. And what I would like to see is affordable volcano monitoring for these countries. And I think that's something that we can start to deliver.

**Brigid Heywood**

We've got strands of research which are all about understanding the human condition and given that we're the Open University it wouldn't come as a surprise that it's the human condition in the context of cognition and learning. We've just completed a major international project around citizenship that was funded by the European Union and that very important project is now informing policy across Europe.

**Hazel Rymer**

I think the difference that we can offer here at the OU when we're teaching science, is that we're not only teaching about the research that we do here or what's going on elsewhere, we use those researchers from wherever they happen to be in the world. And they're able to contribute to our curriculum here so it's science without borders.

**Professor Jonathan Silvertown**

In a standard class of an ordinary University a class of students might be 30, it might even be 100, but it would never be 5,000. And in our Science Foundation Course we have 5,000 students a year. So that means that we can have 5,000 independent observations which is simply not attainable anywhere else.

**Hazel Rymer**

The research material does go straight into the course materials.

**John Zarnecki**

It generates an intellectual environment in which teaching also will flourish.

**Voiceover (on film)**

*Iceland. One of the wildest and bleakest places on the planet....*

**Brigid Heywood**

We recruit students to undertake higher research degrees and we're recruiting them competitively from major international research centres because they recognise that we have a research portfolio which itself is an exemplar of excellence.

**John Zarnecki**

If you have high quality research I think that inevitably it tends to attract the highest quality of staff. Very good people are attracted by an environment in which they can be at the forefront, at the cutting edge of research on an international scale.

**Brigid Heywood**

Open Research online is a research repository into which we place all our research outputs. When we first launched it, we started counting how many countries had tried to log in and look at our research papers. What we now do is count how many haven't. So in a year we've shown that our research has a place in the international community of research. And we're very proud of that and we anticipate continued success with that.