

Acceptance speech on Induction to the Scottish Engineering Hall of Fame

James Watt Dinner, 4th October 2013

It's a pleasure and honour to be standing here before you as an inductee into the Scottish Engineering Hall of Fame.

As an engineer I solve problems and the word problem is seen as a negative word. So, over 15 years ago I decided that I would replace the word problem with opportunity. I informed my team of this new way of thinking, the next day I had a queue of engineers sharing opportunities with me.

My life has been full of solving problems, sorry, opportunities, and my inspiration comes from all the hurdles that have been placed in front of me through my career. I spend at least 25% of my year travelling around the world and Scotland is known throughout for its creativeness and innovation and for me the fuel of innovation is from the numerous black hat people who say it can't be done. As an engineer my goal is to solve the problem no matter what obstacles are put in my path.

My first real life hurdle was when my second year teacher informed my parents that I would never be good at mathematics. I then went on to gain advanced applied mathematics during my final year at Strathclyde University and created a unique formula which allowed the world's first automatic shipyard plate bending machine to be created.

I could talk all night about my experiences, whether it was my creation of *Wideblue*, the company which spun out of Polaroid; or the many engineering challenges of the channel tunnel machine design; or the modular drumstick which won the John Logie Baird Award. But I would like to focus on my most recent experience with *Touch Bionics*.

I joined *Touch Bionics* on 31st July 2007 as the 5th employee; now we have over 104 employees. I knew the challenges that I was taking on but also knew that I could overcome them. Creating a prosthetic hand or finger is extremely challenging as our own hand is a beautiful complex piece of engineering. At *Touch Bionics* we now have several world class prosthetic products which have been fitted to over 4500 patients. I have supported many patients from a young girl aged 8 from England to an elderly gentleman of 85 from New York. I met a young 19 year old male in Texas at the Brook Army Medical centre. He had served in Afghanistan and had lost his arm 3 months earlier and he was fitted with an *ilimb*. When we met he shook my hand with the *ilimb*.

When the *ilimb* technology is used it is a transformational event. The patient and family become overwhelmed and a joyous and heart breaking moment of gratitude occurs for all involved; especially for me being privileged to engineer such an important product.

The progression of this technology has come from my desire to listen to patients to benefit their daily life activities and with the determination and courage to drive these solutions into a previously dormant prosthetic world. The future will get better and I have so much still to do.

One of my life goals is to achieve pattern recognition which is the decoding of the human brain signals to the *ilimb* hand. This means if you think “point” then the hand will point. We are in collaboration with Strathclyde University to achieve this objective.

It’s important to have a great engineering team and I would like to thank some world class engineers Gordon, Rob and Fred from *Touch Bionics* who are with us tonight for their support over the years.

I would also like to thank our Leadership team, Board of Directors, and Chairman for their support and David Gow the founder for making the product possible. Without his innovation I would not be standing here tonight. Also Archangel our Investor Group who have supported us since the company was formed in 2003.

As an engineer/entrepreneur and leader you need courage and determination. However as a wife of such a person you need more. I would like to thank my wife Christine for supporting me on my journey to date. Thank you.

Hugh Gill