

## Once in a Lifetime

David Byrne once said, “And you might ask yourself, ‘Well, how did I get here?’” (Once in a Lifetime, Talking Heads, 1980). As I approach the last few weeks of my time at James Hutton Ltd, I find I am asking myself this very question. Out of all the career paths I could have chosen, how did I end up spending almost 29 years of my life in Dundee and 7 years as Managing Director of James Hutton Ltd? I have never written a blog before, and probably never will again, so please forgive my self-indulgence as I take you on a journey that might shed some light on this question that is vexing me.

Being born and brought up in Sheffield, there was an expectation that I would follow in the footsteps of my father and grandfather and work in the steel industry. However, by the time I was in my teens the steel industry was in decline and mass unemployment was rearing its ugly head. As UB40 sang about being “The One in Ten” (One in Ten, UB40, 1981), I was having lunch at school where 6 out of 8 of us sat at a table had parents who had been made unemployed. I didn’t need to be an expert in statistics to realise that this career option was not worth considering. “Go get a good job with more pay, and you’re OK” (Pink Floyd, 1973) was the message of the day.

A few years above me in my school was an inspiring young athlete by the name of Sebastian Coe. As he went on to achieve Olympic success, my games teachers claimed all the credit for recognising and nurturing his talent. Another of my games teachers was a certain Howard Wilkinson who went on to manage the England football team as well as Leeds United and Sheffield Wednesday. With these talented coaches available to me, was a career in sports a credible option? However, my lack of talent and fitness limited my opportunities to a few appearances as substitute in the first eleven and one appearance in the first fifteen when someone didn’t turn up. A career in sports was definitely not for me.

Around this time at school, we would have weekly careers lessons. In these lessons you had to have a career in mind so that you could complete questionnaires and do research on the academic requirements to help assist in your choice of subjects. At this age, I didn’t have a clue as to what I wanted to do, so I randomly chose meteorology and everyone was happy. It did mean, however, that everyone thought I was going to be reading the weather on the news. At the time I was very quiet and suffered from “a shyness that is criminally vulgar” (How Soon is Now, The Smiths, 1984), so this is something that I couldn’t even contemplate doing. In the late 1970s, early 1980s, no one was talking about climate change but in hindsight meteorology would have been an excellent choice.

Following several years of hard work, I managed to get entry into Cambridge University to study mathematics. I decided to take a year off before starting my studies and was looking for suitable things to do. The local careers office could only offer me a job in the newly opened McDonalds, but I managed to find an internship at IBM near Winchester in the south of England. So, I found myself working in one of the biggest and most prestigious IT companies in the world. In those days, computing was based around large mainframes, so printing something out involved collecting it from another building. I took the opportunity to learn several computing languages including IBM370 Assembly which involved manipulating individual bytes and bits and would take lines of code just to perform a simple mathematical calculation. Although I invested many weeks learning the language, it was obsolete by the time I left, and I never used it ever again. Whilst I was there, IBM launched their first PC in the US, but it wasn’t available in Europe. My boss brought two back from the States with him, one ended up in his office and the second in

mine as no one else wanted it. Though I can claim to have had the second PC in the country in my office, it took me ages to find the on-off switch, and it came with no software at all, so just sat there taking up space. After a year working for IBM, I decided a career in IT was not for me.

During my year off, I changed my mind about studying maths and instead opted to do Natural Sciences. As part of this course, I had to study maths, physics and chemistry and a fourth subject either geology or cell biology. I didn't have a background in either, so it was quite a difficult choice. In the end I opted for cell biology. If I had chosen geology, my career would have taken a completely different path and would probably have ended up in Aberdeen in the oil and gas sector sending samples to The James Hutton Institute for analysis. During my first year of study, I learnt about maths and physics from 17<sup>th</sup> and 18<sup>th</sup> centuries, chemistry from the 19<sup>th</sup> century and cell biology from on-going research. I remember lectures where the lecturer would arrive with a gel still dripping from an experiment that morning and reporting on their latest findings. To me, biology was the science of the time, and I realised this was my true passion. Studying in the same buildings where James Watson, Francis Crick and Hans Krebs used to work, being lectured by Nobel Prize winners (Fred Sanger, 1958 and 1980) and future Nobel Prize winners (Tim Hunt, 2001; John Gurdon, 2012) was truly inspirational.

Having not studied biology at school I had a lot of catching up to do, so during the summer holidays I got a position at the Unit of Comparative Plant Ecology at the University of Sheffield. There I assisted Prof Phil Grimes in collecting quadrats and providing data to support his theories of evolutionary specialisation (competitors, stress tolerators and ruderals). Although the science was fascinating, the work was tedious and backbreaking. When I see JHI staff heading out to the field to collect samples, I can empathise as I have first-hand experience of this type of work. One day I was approached by an academic named Prof Rod Hunt, who worked in the same department. He had some data that he hadn't had time to look at and wondered if I could analyse it using SPSS. There were no obvious correlations between the different parameters until I had the idea that the performance of these plants was dependent on what had happened the year before rather than the current year. With this breakthrough I managed to identify several interesting correlations, deemed worthy of publication, so by the age of 19 I was submitting my first academic paper. If I could publish a paper after a few hours work and had been trained by world-leading scientists, surely it was just a matter of time before I was winning a Nobel Prize as well. However, it turned out that Cambridge was full of exceptionally bright people and I was at best a mediocre student, so these dreams were quickly dashed.

Arriving in Cambridge from an inner-city comprehensive in Sheffield and being surrounded by students from Eton, Harrow and other public schools was pretty intimidating at first, especially as they seemed to know every other person and I knew no one. My neighbour at the time was from Harrow school and he used to eat in Hall every night, whereas I would cook for myself in the communal kitchen. One evening, he got back late and missed Hall, so he had to cook for himself. Whilst I was washing up, he came to me and asked if I could help him use a can opener as he had never used one before. Presumably he had people at home who did all the cooking for him. I duly obliged and reflected that for all his expensive education and fancy Latin phrases he hadn't actually learnt anything useful, and he was quite under-confident when he came into contact with the real world.

Another contemporary of mine was a future government minister (name redacted for legal reasons) who served under the governments of Boris Johnson, Liz Truss and Rishi Sunak. The last time I saw him he was extremely drunk and had his trousers round his ankles in the college common room. Luckily for him there were no mobile phones at the time, so the Honourable

Member avoided the embarrassment of these photos emerging in the future. A missed opportunity for a career in photo-journalism or to join the paparazzi perhaps.

It is fair to say that I didn't see eye to eye with this unnamed minister on political matters. During the holidays I would return from the ivory towers of Cambridge to picket lines and demonstrations of Sheffield in the middle of the miners' strike. My political aspirations, however, were met by joining the newly formed Cambridge University Raving Loony Society chaired by John Desmond Lewis. At the time there were only about 6 members, but it soon gained notoriety when John changed his name by deed pole to Tarquin Fin-tim-lin-bin-whin-bim-lim-bus-stop-F'tang-F'tang-Olé-Biscuitbarrel. He was studying at Trinity College where all students had their names hand-painted onto the doors of their rooms. Of course, he insisted on having his full name painted, which the college refused to do and so ensued an almighty row. They started to field candidates at by-elections and needed money to pay deposits, and I decided it was all getting too serious for me. I had long departed before they merged with the Screaming Lord Sutch's Monster Party to form the Official Monster Raving Loony Party which still fields candidates today. So, a career in politics wasn't for me.

Every Wednesday I used to go for a pub lunch at The Mill situated next to the Department of Applied Mathematics and Theoretical Physics on the banks of the Cam. On the table next to us was always a group of researchers from DAMTP including a guy in a wheelchair. I had no idea who he was but was informed he was called Stephen Hawking. Whilst I was contemplating whether to have the steak and kidney pie or fish and chips, he was writing a Brief History of Time and pushing back the frontiers of cosmology. I never did speak to him and never appreciated his genius until many years later. To me he was just another drinker in the pub.

Whilst studying at Cambridge, I read an advertisement that stated, "Astronaut wanted, no experience necessary." They were looking for scientists to joint Project Juno which was aiming to improve UK-Soviet relations by sending a British astronaut to the Mir Space Station. I applied and got through several stages of interviews, but my lack of Russian meant I eventually got rejected though I did get a special sweatshirt that I wore for several years. It might have seemed a fantasy, but the person who did get selected, Helen Sharman, was born and brought up only a few miles away from where I was brought up and was at the University of Sheffield at the same time I was working there. So instead of "Floating around in a tin can, far above the moon" (Space Oddity, David Bowie, 1969), I ended up in California. Not the one in the US, but California, Birmingham near the University of Birmingham.

I did however pass my degree, albeit without any distinction, and decided that I would like to carry on studying. I didn't have a good enough degree to do a PhD so opted to do a Master's degree in Process Biotechnology at the University of Birmingham. Although I had a degree in Biochemistry, I had a far better background in maths and physics than most biologists, so this course played to my strengths. A career as a world-leading scientist seemed out of the question and I wasn't interested in politics. But another other career open to Cambridge graduates was espionage. So, I found myself flying out to the German Democratic Republic, ostensibly as a research fellow at Martin Luther University in Halle, but perhaps with another agenda? To get permission to go behind the Iron Curtain, I had to travel to Whitehall to be interviewed by the Foreign Office. In a scene straight out of Yes Prime Minister, I was given advice such as "don't be seen photographing anything, even buses as you could be arrested", and "you will be followed everywhere, you might not realise it because they are very good at it". It was clear that they had never been behind the Iron Curtain themselves and didn't have a clue about living there. The lack of knowledge was astounding, the British Council even booked me on a flight to West Berlin

rather than East Berlin as they didn't realise there were two airports in Berlin. This resulted in my entering the GDR by myself and not being met by the authorities, so I didn't complete the necessary paperwork and was essentially in the country illegally. Anyway, I eventually arrived in Halle and started work at the University and made some really good friends. It became clear that they had very limited knowledge of life in the west and their only perception of a British citizen was a cross between James Bond and Sherlock Holmes; unfortunately, I didn't live up to this stereotype. During my time there, they arranged for me to travel to Prague to visit another research institute they collaborated with. Prague at that time was virtually deserted with no tourists other than a few groups from the Soviet Union. Problems arose when I tried to get back into the GDR as I didn't have the appropriate paperwork. I also didn't have permission to stay in Czechoslovakia so for some time they didn't know what to do with me. In the end, they decided to let me back in as otherwise they would have to admit that a westerner had been in the GDR for several months without the knowledge of the authorities. Looking back, I might have made an excellent spy.

Martin-Luther University was located next to a large Soviet army base on the outskirts of the city. I often used to work late at night so I could access the one PC that was available to me. As I was returning home one evening I was stopped by a Soviet army truck and the driver asked in broken German for directions to their army base. I replied in my broken German and gave them correct directions. They obviously realised that I wasn't German, but I heard them talking amongst themselves that they thought I must be Czech. I often think should I have pointed them in the wrong direction or what would have happened to them if it came to the attention of their superiors that they had taken directions from a British citizen.

During my time in the GDR there were elections where Erich Honecker, leader of the Communist Party, was up for re-election. Even though Perestroika and "The Winds of Change" (Scorpions, 1990) were taking route in the Soviet Union, the GDR remained a hard-line communist country with little or no concessions to changing public attitudes. I had lived in the GDR long enough to vote but I didn't exercise my right. When the results were announced, the turnout in Halle was given as 99.99% and the vote for the party 99.98%. Everyone knew I hadn't voted so were blaming me that the turnout wasn't 100%. In fact, everyone knew lots of people that hadn't voted, and that the election was a complete scam and there was widespread discontentment. The first cracks were starting to show by the time I left, and several people had driven their Trabants to Hungary and subsequently onto West Germany. However, I was surprised by how quickly things changed in the subsequent months and the subsequent fall of the Berlin Wall in November of that year. Although I never was officially employed as a spy, I do think that I did play a small role in regime change.

After I completed my PhD, I was invited to do a Postdoc in Czechoslovakia at the Institute of Chemical Process Fundamentals in Prague. This was after the fall of Communism, and the country was still coming to terms with its past and trying to oust former party members from senior positions of responsibility leaving a vacuum and lack of leadership. During this time the idea of the country splitting into two was gaining traction. I had it explained to me that the Czechs know how to brew beer and have taught the Slovaks, and the Slovaks know how to make wine and have taught the Czechs, so they could no longer see any benefits of being together as one country. So yet again, political upheaval followed me and the country divided not long after I left in January 1993.

Having brought down two countries already, my next move to Switzerland seemed a safer bet. I spent two years at ETH-Zurich where I utilised my background in biology and mathematics to

contribute to the writing of two textbooks on environmental and bioprocess engineering modelling. Little did I realise how useful this would be in my future career.

In 1992 I successfully applied for a STA Fellowship to study at the National Food Research Institute in Tsukuba, Japan. Not only did I develop a love of Japanese food and culture, I also met my future wife. Amongst other things we shared a love of karaoke. For an introvert like me, the thought of having to sing in public would have brought me out in a cold sweat, but Japanese friends were so supportive and appreciative of anyone who made an effort - regardless of how good or bad they were. Japanese colleagues who barely spoke a word during the day, would suddenly transform into Elvis singing "Rub me Tender" (Love me Tender, Elvis Presley, 1956) once a mic was put into their hands. My go-to songs included California Dreamin' (Mamas and Papas, 1966) as a duet with my wife and "Englishman in New York" (Sting, 1987) which I would change to "Englishman in Tsukuba". My research was related to oils and fats, and our lab had a copy of the "Lipid Bible" edited by Prof Frank Gunstone. When I moved to SCRI in 1997, I was delighted to hear that Frank was now based at the Institute and had established a commercial business which still runs today.

After two years in the research institute, I moved to work for Nippon Lever in Utsunomiya. My role was to identify and manage research projects in Japanese universities and research institutes that would benefit Unilever operations worldwide. I also responded to requests from other divisions of Unilever for information on new product development in Japan that might generate ideas for new products. One such project involved going round Japanese supermarkets buying two of every ice cream product on sale for Ben and Jerrys. One was sent to the US and the other we tasted and wrote up a report. Whilst this sounded like a great job, it soon became apparent that there is only so much ice cream one can eat in a day and I wasn't cut out for a career as an ice cream taster. This project led to the release of an ice cream taco which was briefly on sale in the UK but was a commercial disaster. Several projects were related in green tea, and particularly the health benefits compared to black tea. This involved drinking large amounts of green tea, resulting in my urine turning green which was quite concerning at the time. Another project I worked on was looking at machines to make tetrahedral tea bags. This technology existed in Japan for green tea, but Unilever wanted to introduce it for black tea for their Lipton brand. This project was more successful and the tetrahedral tea bags you can buy today owe their provenance to the work we did in Japan in the mid 1990s. I would regularly visit research institutes to get an update on the research projects we were funding. I got two types of report, the first was a page of data, hastily put together and giving the impression that the scientist didn't take the research seriously. The second type was a massive document with pages and pages of data and results, details of methods etc. When I showed these reports to my boss, he would always ask "How is this going to help me sell more tea?" This experience stood me in good stead when I was working for SCRI/JHI and talking to commercial funders. They usually aren't interested in detailed literature reviews nor details of the methodology used. They often aren't even interested in the results and pages and pages of data. What they are really interested in is how this work can help them sell more product or solve a problem. This requires a completely different style of writing than a scientific paper but something that most of our scientists are now very adept at.

In 1997 I accepted a job as Commercial Manager at Mylnefield Research Services Ltd. On my interview panel were John Hillman, Nigel Kerby and Bill McFarlane Smith. One of the questions that I got asked was "What would you do if an Institute scientist came to you and said that they had made an earth-shattering discovery and wanted to protect it?" My answer was that I would

be highly sceptical and would investigate whether anything had already been patented. It wasn't the answer they were expecting but they seemed to like it and offered me the job. These three individuals had a big role to play in my future career, but all shared the ideal that work should be fun. John Hillman was known for his repertoire of jokes, most of which wouldn't be tolerated today and some of which would probably get him fired.

When I joined MRS there were only three other employees, one of whom, Anne Ross, is still here today. I was made to feel very welcome and part of the team and I am grateful to Anne and others for the support and advice they gave. Working at MRS and then JHL hasn't been like just a job, I have always felt a degree of ownership. I was inspired by Nigel Kerby's vision, enthusiasm and boundless energy. From those 4 people (shortly to be joined by Lesley Beaton), and a turnover of £100k, I am proud of the fact that we now employ 45 people with a turnover of more than £6 million and have aspirations to grow to 65 members of staff and a turnover of at least £12.5 million. When I joined, commercialisation was seen as a dirty word by many scientists and bit of a luxury for others. Nowadays it is seen as absolutely essential for the survival of the Institute and is embraced by the majority of scientists. I have had the pleasure of working with many world-leading scientists and talking about their research. I have travelled the world on business and had the opportunity to visit many fascinating places including the Brazilian rainforest, the Terracotta Army in X'ian, mission control at NASA in Houston and many more. I have been flown in Hugh Grant's private jet (the Monsanto CEO, not the actor), have drunk red wine from the best chateaus in France and attended banquets in China, Japan and India. I have been driven around St Louis by Glen Bryan with Tim George, Ian Toth and Dave Marshall playing Born to Run at full volume (Born to Run, Bruce Springsteen, 1975). I have met Ministers, Ambassadors, Royalty (well Princess Anne for 2 minutes) from all over the world. But it hasn't all been fun, I have also spent days in pouring rain in muddy potato or barley fields in several countries, spent hours stuck in airports, especially Amsterdam.

Looking to the future I am delighted to be handing over the reins of JHL to Ian Archer. The lyrics "Meet the new boss, Same as the old boss" (Won't get Fooled Again, The Who, 1971) spring to mind. Ian carries on the legacy started by Nigel Kerby to show a real interest in the science, invest in the development of our people, work tirelessly and most importantly have fun. He brings his own ideas and new ways of doing things and I am sure he will succeed. It won't be easy and he will need the full support of everyone, but I am confident he will build on the firm foundations in place and achieve our ambitious goals.

As for myself, I am looking forward to spending more time with my wife and children. I will also be talking up a role as an advisor to greenCrowd, a consultancy and investment fund focussing on startups in the renewable energy and sustainable agriculture. It will be a real novelty to be working an organisation looking to invest rather than trying to get money out of others.

My career as a weatherman, astronaut, undercover agent, politician or working in the steel, IT or oil and gas industries never materialised. Despite associating with Nobel Prize winners, world-leading scientists and working at some of the most prestigious academic organisations in the world, I never made it as an academic. Do I have any regrets? Absolutely not! I have had the privilege of working with, and learning from, some outstanding people from all over the world.

So, do I now know "How did I get here?" Not really, but I know this: when these "Once in a Lifetime" opportunities came my way, I grabbed them with both hands even when I didn't know where they might lead.

Jonathan Snape, April 2026

**Playlist of my Life (available on request)**

Once in a Lifetime	Talking Heads
Winds of Change	Scorpions
Space Oddity	David Bowie
How Soon is Now	The Smiths
One in Ten	UB40
Won't Get Fooled Again	The Who
California Dreamin'	Mamas and Papas
Englishman in New York	Sting
Love me Tender	Elvis Presley
Born to Run	Bruce Springsteen
Money	Pink Floyd
Berlin	Lou Reed