

A is for Acronym!

Alexander Hughes, Roche Products Ltd., Welwyn Garden City

ABSTRACT

A light hearted account looking through the eyes of a new starter and his induction into the pharmaceutical industry. Covering the first six months of my career, coming straight from postgraduate study, I take a look back at my early and naive days of; protocol deciphering, programming debugging and attempts at understanding the endless, ever-changing, list of acronyms that are now part of my everyday life.

INTRODUCTION

This paper has been submitted as part of PhUSE 2011, Industry Starters stream. The paper covers the first six months of my career in the pharmaceutical industry at Roche Products Ltd. It is essentially a montage of anecdotes containing snippets of advice for other new starters in the industry.

A LITTLE BIT LIONEL

Things changed rapidly for me over the summer of 2010. The previous year, I had planned a yearlong excursion through the Andes, culminating in three months living in Patagonia. This would be the cliché gap year before looking for a permanent occupation. A serious knee injury in early 2009, however, put the trip into serious doubt and by mid-2010, after failing to recover sufficiently, I was due to have surgery on it. I decided to abandon the trip and skip ahead a year to seek employment.

My interest in medical statistics was first sparked in the final year of my undergraduate degree. Investigating clinical trials and exploring survival analysis inspired me to pursue my interest in this field through further study. The following year I embarked upon an MSc in Statistics. My dissertation involved extensive programming which was very challenging and required me to draw heavily on my problem solving skills; this experience inspired me to look for programming related roles within the pharmaceutical industry. A few months later, I was fortunate to have an offer of employment at Roche Products Ltd. in Welwyn Garden City. I was to start in November.

I arrived to the induction on crutches, which made for some interesting conversations. The week I started, the weather had taken a turn for the worse. For England, we were experiencing unreasonable amounts of snow. We were given a nice tour of the building and grounds and then had our job roles explained to us. Before I knew it, I was sat at my desk reading documents for drugs that I could not pronounce.

MY FIRST ASSIGNMENT

My opening days were spent reviewing protocols and attending internal training sessions. I was due to meet my Team Leader one morning, but to my horror I was sent this email;

Hi ALl,

Sorry not in today, snowing so WFH. Could you look at the DAP/DRAM and hopefully next week you can QC some SDTMs.

Dave

After spending too long stewing over whether or not ALl was a mistyping of All, Alex or even Al, I moved onto the main body. Suddenly there was panic, the email was only two sentences long and yet I couldn't decipher anything. This was my first code to crack and I hadn't even done any programming. Not many people were in the office at the time and the snow had been terrible. Maybe they were all late? Or maybe working from home? Can they do that? Wait, is that what "WFH" stands for?

Next, onto the task at hand; "look at the DAP/DRAM". Wait, what's a "DAP/DRAM"? I would ask someone if there was anyone around. If I "QC some SDTMs" what does that mean? Well, that *is* next week's challenge, maybe I shouldn't worry about it now... Luckily, soon after this cryptic email had come through, someone came into the office

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and gave me some directions. Moments later the AAAZ (Alex's Acronym A to Z) list was born. Many industries are full of acronyms and the pharmaceutical industry is no exception. My reference list served me very well for the first few months.

WHAT DOES SAS STAND FOR?

Just before the Christmas break I was sent out to the SAS® Institute in Marlow for programming training. The course I completed was Programming I, SAS Essentials, aimed at beginners to the software. My first adventure! It did not get off to the best of starts as the car hire let me down at the last minute forcing me to use public transport. This would not have been a problem, had I used the London Underground before. By now, the snow was at the worst it had got all year and after some perseverance, I arrived in my hotel after four hours of travel. At the same time, thousands of people had been grounded at Heathrow airport because of the weather so I was probably quite lucky. The snow continued through the night and things did not improve in the morning. The hotel was unable to confirm a taxi as none were running so I put on my hiking boots and set off. According to the map provided by the Institute, the walk to the destination was feasible. What I had not noticed though, was that the map was not to scale. Despite all this, after a refreshing four miles hike, I successfully made it to the institute.

The course itself was very good (not only because it was held in a warm environment). Some parts may have revealed tedious detail, but as a pedantic student of mathematics this very much suited my style and led to a very interesting introduction to SAS. Over my first six months at Roche, I constantly referred back to the course notes provided which is a testament to the quality of them. I would recommend the course to anyone who requires a thorough grounding in the basics - ideal for people new to SAS regardless of industry.

"THREE QUOTES"

"Now what is the message there? The message is that there are known "knowns." There are things we know that we know. There are known unknowns. That is to say there are things that we now know we don't know. But there are also unknown unknowns. There are things we don't know we don't know. So when we do the best we can and we pull all this information together, and we then say well that's basically what we see as the situation, that is really only the known knowns and the known unknowns. And each year, we discover a few more of those unknown unknowns."

Donald Rumsfeld (2002)

An end of year review proposed some very interesting points for me. I had worked at the company for just over a month and had begun to take on more responsibilities. My most common failing was, when programming, spending too much time on what appeared to be a simple problem. I was reassured that this was normal and the stand out message I took from the meeting was, "sometimes when you're learning to program, the main problem can be; you don't know what you don't know." A fair point, this reminded me of a famous speech that Donald Rumsfeld had given in 2002 (albeit an adaptation of an Old Persian proverb). This prompted me to purchase the book, "*Learning SAS by Example: A Programmer's Guide*" by Ron Cody, which has been instrumental to my progress this year. This, at the very least, revealed some of my "unknown unknowns", turned them into "known unknowns", soon to be "known knowns".

"I've missed over 9,000 shots in my career. I've lost almost 300 games. 26 times I've been trusted to take the game-winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed."

Michael Jordan (1998)

Another thing I had picked up from the manager and mentoring meetings was "don't be afraid to fail". My whole degree had been based around doing a task again and again until I had mastered it, and SAS programming was no different. There was no shame to asking for help, as much as there is no shame failing – I have found throughout my career that it is a good way of making progress and being successful.

"It is easier to do a job right than to explain why you didn't."

Martin Van Buren

Finally, here is a motto that I have taken through university but also applied during my time at Roche. It is about *responsibility* and *getting the job done*. In programming; there are many ways to approach a task, there are many right answers, there are varying difficulties in both tasks and approaches; what doesn't change is the fact that there is a job to do. It is important to take responsibility for it, and it is always beneficial putting effort into completing the task.

THOSE WHO CAN, TEACH

The mentoring scheme at Roche dictated that I was to, as a junior programmer, produce a training session for the department. My topic was based around UNIX. This proved to be one of the greatest challenges I have encountered at Roche. Previously all my tasks had been related to SAS programming, where I had been closely shadowed.

Although I had been assigned a mentor, I had to work independently and I had to decide on the content. Not only that, I had to learn UNIX first! I used a range of books including; "*UNIX in a Nutshell*" and "*Learning the Unix Operating System*". These provided me with all the fundamentals that I needed to develop the course. This was the first opportunity that I was given to present in front of the department. Ultimately the training was well received and I received recognition from my colleagues.

THE MOST EMBARRASSING THING...

Some of my friends often ask me, "What is your most embarrassing moment at work?" Without boring them with syntax errors and the inevitable embarrassing misspellings of medical terms, I choose to tell a toilet story. The building that I work in has toilets at either end of the building on each floor. Conveniently these pairs are symmetrical, which means the males and females are on different sides depending on which end of the building you are. One time, when I was on the opposite side to where I am usually, I made a more than slight error of judgement. I did manage to negotiate the correct toilet but unfortunately, on my exit out of the toilet, I walked out of the door straight into the wall (if I had been on the other side, I would have walked out into a corridor). Maybe no one noticed? No, everyone around definitely did... Needless to say, I haven't made the same error again!

PSI ITIT

Towards the end of my six months at Roche, I had the pleasure of attending a PSI ITIT (Introduction to Industry Training) session which was held at AstraZeneca, Alderly Park site near Macclesfield. The two day course covered all aspects of Clinical Trials including how statisticians and programmers were involved. They had some talented speakers lecturing about their specialist areas and I really learned a lot from them. It was intriguing to meet the other people on the course who were of similar levels of experience from across a range of companies within the industry. I was interested to learn about their routes and different backgrounds. Furthermore, in the following months, I was given the chance to attend the final two sessions; Licensing and Marketing at Amgen (Uxbridge) and Lilly (Surrey) respectively. Once more, I was presented with an array of talented specialists allowing me to expand my knowledge further.

On reflection, I thought it was amazing how such an organisation and initiative existed! PSI is a non-profit organisation, with members from all areas of the drug development process. The ITIT course is run by a committee that serves to give newcomers to the industry an insight to the many different aspects of the industry across different companies. For each session, a different company opens its doors and allows the participants access to their facilities and experts. I was left wondering, "does such a system exist in other industries?" I consulted friends I knew in; Music, Law and Finance who did not know of such a comparable initiative. In what is a very competitive industry, it is reassuring to know about the work that PSI does. If any new starters get the opportunity to go on the course I would strongly recommend it. It was disappointing to hear that the course will not run in 2011-2012 but I do hope it makes a swift return the following year.

CONCLUSION

In conclusion, I have really enjoyed my short time in the pharmaceutical industry. I am able to use the knowledge and skills that I developed during my degree towards the problems and challenges that occur every day at work. Roche has also been able to facilitate my hunger and desire to develop my knowledge and skills further and I can see myself enjoying the rest of my time within the industry. Although the onslaught of acronyms may be a necessary evil they do not detract from what is an innovative and evolving environment - my time on the PSI ITIT courses was a testament to that and I hope to continue developing my career in the same manner that I have done up until now.

REFERENCES

Quotations;

Donald Rumsfeld; from press conference at NATO Headquarters, Brussels, Belgium (6/6/2002);

<http://www.defense.gov/transcripts/transcript.aspx?transcriptid=3490>

Michael Jordan; from p49.

Papson, S. *Nike Culture: The Sign of the Swoosh*, Sage (1998)

Martin Van Buren; unsourced but commonly attributed

http://en.wikiquote.org/wiki/Martin_Van_Buren

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RECOMMENDED READING

Robbins, A. *UNIX in a Nutshell* 3rd Ed. O'Reilly. 1999
Peek, J. et al *Learning the UNIX Operating System* 4th Ed. O'Reilly. 1997
Cody, R. *Learning SAS by Example: A Programmer's Guide* 3rd Ed. SAS Press, 2007

CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

Author Name	Alexander Hughes
Company	Roche Products Limited
Address	6 Falcon Way, Shire Park
City	Welwyn Garden City
Postcode	AL7
Work Phone:	01707 36 6663
Email:	alex.hughes@roche.com

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