

Bringing home the America's Cup

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THANKS

Mr President, distinguished guests, fellow scientists, technicians, colleagues and friends, I feel enormously privileged to be standing in front of you today. I am immensely proud but also humbled to have been invited to deliver the TH Pullar address for the 2017 Annual Scientific Meeting.

HISTORY OF TH PULLAR ADDRESS

As is customary, I will start with a brief history of the very significant contributions that Dr Pullar (or Thos as he was known) made in the field of pathology in New Zealand. He was a man of extremely high principles and a sound clinical pathologist. He was born in New Zealand in 1907 (110 years ago) but educated mainly in England and Scotland. In 1937 (80 years ago) he moved back to New Zealand and was appointed Pathologist to the Palmerston North Hospital, a position he held for 25 years. During that time he made a great contribution to the advancement of clinical pathology and medical education, his greatest contribution to our profession was through his involvement in the training of medical laboratory technologists. Any aspect of laboratory work was of importance to him but he was intensely involved in the training and welfare of medical laboratory technologists; he helped draft conditions of employment used in laboratories throughout New Zealand, was actively involved with preparing syllabi, and was an examiner for many years. Dr Pullar was a lifelong friend, teacher and champion of our profession. It has been tradition for the Annual Scientific Meeting to open with an address to commemorate this huge contribution made by Dr Pullar.

So, back to the address. When I received the invitation to speak from Fran on behalf of the Councillors for the NZIMLS, it ended "Was I able to accept?" What would your reaction have been?

Two thoughts immediately crossed my mind:

1. WOW, what an honour
2. EEK, why me?

And then I re-read the letter in which Fran had highlighted my career to date. I'm still not entirely sure why me, maybe it's just because I've 'been around' - been hanging around labs for 45 years in fact! And I've tested the waters of most facets of laboratory life!

- Trainee in a large teaching hospital
- Shift worker, weekends, night duties and on-call in a big laboratory
- Section head
- Lecturer
- Diagnostic and Biochemicals sales representative, which also included Point of Care instrumentation and molecular diagnostics
- Provided diagnostic applications and support for both large and small labs
- Practicing Scientist, Fellow of NZIMLS and currently on the Fellowship Committee
- CPD coordinator the face of CPD in New Zealand for the NZIMLS...and I've been into every laboratory in the country

So maybe I was "Lighting the Way", the theme for this year's conference.

WHAT TO TALK ABOUT??

So it came to what to talk about that would portray that message – the nautical theme and the slogan 'lighting the way'. With the successful campaign of some New Zealand yachties in Bermuda recently winning the America's Cup, bringing it home and then touring the country with it, it seemed appropriate to think about that accomplishment and make some analogies in how we work in our laboratories these days.

Anyone going out on a boat knows there could be danger involved; you will either sink or swim, (as could I up here) so like any good boatie, I've brought my life jacket along with me just in case! Have you got yours? Even when you get on a plane these days they tell you your life jacket is under your seat. Go figure!

History of America's Cup (or 'The Auld Mug')

- Oldest International Sporting Trophy founded in 1851.
- It is not only a test of sailing skill and boat and sail design, but also of funding and management skills.
- Over the years, not only the designs of the boats have changed, but the course and rules the yachts sail under have also changed. It is continually evolving and the holder of the cup has a lot of input into the changes made each time.
- The boats now have revolutionary winged keels, their hulls are currently made of fibreglass rather than aluminium or wood, and their sails are now made of Kevlar rather than canvas.

Technology and professionalism have become increasingly important in America's Cup racing. Does that sound familiar? I'll say it again ... *technology and professionalism have become increasingly important!* It is this statement that really provided the opportunity for me to compare America's Cup racing with Medical Laboratory Science and our continual need to be updating our knowledge.

Breakdown of Race

Becoming a Medical Laboratory Scientist or Technician is like being in an America's Cup Race – let's break down an America's Cup yacht race.

- there's the starting box – this is what subjects to take at school to make sure you are well prepared and won't be stalling or even barging at the start line – because there are time penalties involved with this – just like in America's Cup racing!
- a series of upwind and downwind legs – three years in our case - these could be your years at University, some of which will be easy, and some which may be a bit more difficult for you.
- a reach (the fastest point in sailing) for the finish – this is your placement year, you've done all the hard work and now it's time to put it all into practice and finish off the qualification.
- and then there's the aftermath, which isn't always a party and probably doesn't involve touring the country with an impressive piece of silverware! This is what happens when all that training is over. You now need to obtain registration with the Medical Sciences Council and then find yourself a job (of course, you may need to tour the country a bit to do this!)

So, have you won that cup? Actually no, you've really just won the Louis Vuitton Cup, you've now qualified for the right to compete for the America's Cup, it is still to come!

During your training years you will have needed to decide which side of the course to take, that is, what disciplines interested you the most, chase the wind shifts, ride the waves, survive the knockdowns, gybe and tack, and do all this without incurring any penalties or losing the advantage. No penalties because you need that job at the end of it all; you don't want your reputation or behaviour to impede or put off any future employers and you still haven't been through that rigorous check from the Medical Sciences Council to obtain your Annual Practising Certificate - where one of the requirements is to be an upstanding citizen!

The Annual Practising Certificate: This is the real 'CUP'

This is what needs to be defended, so in other words, your Competency and Professional Development needs to be maintained for every year you want to keep that cup, or for every year you want to practice as a Medical Laboratory Scientist or Technician.

So, once you've won that cup, you now need to defend it. You will need to be continually working to keep that boat fine tuned and on course. Everything needs to be finely balanced, with plenty of diversification, and not all the eggs in one basket!

Defence of Cup

You could become involved in chasing the dollars, or redesigning the boat, updating the technology, researching new materials and methodologies, training new recruits and making sure everything is shipshape – does this sound familiar? These are all aspects that the Team New Zealand people are going to be working on before the next defence and it certainly sounds like being a Medical Scientist to me especially with the diversification of employment opportunities that are out there nowadays. All the while you need to stay ahead of the times, stay up on your foils and be the absolute best you can possibly be, because there's an entire nation out there depending on you to keep that cup – in our case, the entire nation is our patients and their Doctors. How are we going to do this? With professional development of course!

I'm not going to talk about the changes in education programmes, the huge advances in technology, IT or management of laboratories because many before me have done that. Whilst we need to keep abreast of all this, the way to keep ahead is with professional development.

So, let's talk about Professional Development – our duty to our patients

Racing along – we want to be like this, finely tuned, racing along, on top of our game! Professional development, continuing education, whatever you want to call it. It shouldn't be thought of simply as the number of points or hours we need to clock up to gain our APC and keep our 'licence to practice' current – it is our professional responsibility to ourselves, our work colleagues, our profession and most importantly our patients.

45 years down the track, am I still doing what I was doing when I first started in the laboratory? No, and neither are they racing America's Cup races in the same sort of boats they used 45 years ago, the hulls have changed, the materials have changed and the rules have changed!

So what has been going on? We've been professionally developing of course - even if we don't realise it, it is ongoing, we are doing it all the time.

We need to actively engage in learning to maintain and enhance our professional competence and performance. Professional development is the way we expand the depth and breadth of our expertise and keep abreast of the rapidly expanding knowledge related to technology and development in our field of Medical Laboratory Science (or any other profession for that matter).

I remember many years ago when I was head-hunted to be the Clinical Chemistry tutor for the Auckland School of Medical Technology, I declined saying that I didn't think I knew enough to be taking on that important role. The Head of the School told me I would be surprised at how much I did actually know. Nowadays, I believe the more we know, the more it hits home how much we don't know! Professional development is engaging in lifelong learning, and clearly, there are some of us around who have spent the majority of their life learning in this profession.

From Wikipedia: "professional development is learning to earn or maintain professional credentials; anything from academic degrees to formal coursework, conferences and informal learning opportunities situated in practice. It has been described as intensive and collaborative, ideally incorporating an evaluative stage." I believe this statement covers the CPD programme we use perfectly, you'd think Wikipedia had read our programme requirements.

Adversity/Diversity

We have to make adversity work for us. One of our Pathologists at work made the statement to me that 'not everything goes to plan in life does it?' He was speaking from a medical point of view and he was referring to disease processes and outcomes, and he said that despite all the best intentions to be in control, there are two things that the medics can't control – childbirth and cancer!

Having managed to live through the former twice and then survive the latter 11 years ago, I feel I can speak from a bit of experience when I say we need to overcome obstacles and turn negatives into positives, to learn from everything both good and bad.

Had I not survived breast cancer, I would never have taken up paddling as a sport, and would never have made so many friends who, to use our team expression, are all in the same boat. I am now an International Athlete, I've found my sport, it keeps me fit and I can do it all sitting down. Breast cancer paddling has taken me all round the world. Dragon boat paddling is a very old sport, starting in China many years ago, and waka-ama (outrigger paddling) goes back beyond the first settlers in our own country. There is a continual learning process involved with these sports too - boats are becoming lighter and more streamlined, paddles are made from new materials, the stroke is being ergonomically improved - all the time the paddlers themselves are getting older! There are new innovations involved with this sport, stand up paddle boarding being one of the latest.

There is even professional development in our dearly beloved game of rugby, look at how difficult it is for the referee these days to get it right, even with the aid of TMO technology! The rules are constantly undergoing revision and the players and referees need to keep up with this!

Competency

Of course, as well as professional development, you also need to be competent. You can't have incompetent scientists and technicians in the lab, just like you couldn't have incompetent sailors crewing that finely tuned boat, or incompetent rugby players out on the field in a top level game of rugby! Proof of competence is a huge part of CPD and reassessment of this competence is paramount.

Team Work

Which leads me on to team work. You are part of a team, even when you're on your own on a shift in the middle of the night! Not just the lab team - from the Phlebotomist right through to the Pathologist, but also from the ill or suffering patient, full circle through the entire medical team and back to the patient again. Our job is to help make that team job easy, it's a team thing and we need to be cohesive.

You need to learn to work as a team, a competent team. If you have one bad sailor, expect to be at the back of the field. And like all good teams, you need to train to be a team, every single person in any team relies on all those other blokes in the team to be competent too, and to be doing their job.

These guys can cycle, they can sail, they can trim a boat - but they still have to train, and they all need to be working together to make sure the end result is the best it could possibly be. (Did you know it is actually part of your professional duty to report incompetence?) Help others be good team members, go to a "Grand Round" and see how other members of our wider team all work together for the benefit of the patient!

Imagine, just imagine, if this guy, (Donald Trump) was in your team! And worse still, if he was the helmsman, you'd be lucky to even sail the same course as the other boats in the race! You'd even be wondering if you still had a job each day when you arrived at work.

Things change!

We need to be able to change because things do change. Every lab, even in our own country, is very different and constantly evolving - one of the reasons why your competence needs to be signed off every year. Some things we can't control, and if we pitch pole, we need to be able to get back on board (the old sink or swim story). Just like if we decide to jump ship, there's not too much wrong with this, provided you know how to get back on board again. New diseases change our way of thinking, analysis methods have changed significantly, new disease detection methods have changed our way of diagnosis - we are often working at gene level now.

Look at how Health and Safety has changed over the years - no more mouth pipetting, eating tea in front of the analyser while on night shift, using a beaker on your bench as your ash tray! Never-the-less, sometimes we need to go backwards in order to go forwards - there's a reason the rearview mirror is so small and the windscreen is so big - where you are headed is much more important than what you've left behind. However, don't underestimate those years of experience, they count for a lot and you never know when you may need to look into that rear vision mirror!

Stay on top of problems, (your QC officer is speaking here), stay on top of your foils, make sure everyone in the team is paddling in the same direction, and always keep good, accurate records. If you're going to break any records, you need to know how you've done it, and so does everybody else.

It is absolutely essential for us to provide the highest quality services to our patients - it is our duty to our patients! Professional development is not insignificant, either nationally or internationally. It is there to meet government regulations, requirements and legislation. We owe it to our patients to learn as much about what we're doing as we can, and to be the best we can possibly be!

We can't all be a Peter Blake or a Peter Burling, but we all need to take responsibility for our own learning and development if we want to be part of a winning team, and not on a sinking ship!

And remember, without innovation there's only stagnation! Look at the success of those cyclors and how they managed to make Jimmy Spittle appear almost stagnant in the water!!

So, have you learnt anything from all of this?

To leave you with some nautical memories of "lighting the way" I'm going to give you a short boating lesson



In navigation on the water, we talk about cans and we talk about cones.

We talk about red and we talk about green.

We talk about port and we talk about starboard.

We talk about left and we talk about right.

We talk about red lights and we talk about green lights

So that gives us, **CAN** you see the little bit of **RED PORT LEFT IN** the bottle?

These are our channel markers, but of course, it depends on which direction you are headingso...when entering a port or harbour or going upstream, this is the way to use them. The red can shaped beacons go on your port (left) side. It's the opposite when you are leaving.

(You know, even navigation systems undergo change and require professional development. When I studied for my Boat Masters Certificate, starboard markers were painted black and not green, but they had green lights. One of the girls in our class asked the tutor "Sir, if the red buoys have red lights, why do the black buoys have green lights?" The tutor replied "well, they tried black lights, but people found them a little difficult to see!")

I've talked about Competence

I've talked about Professional Development

I've talked about Team Work and Training

I've talked about Record Keeping

All part of America's Cup Racing and all part of being a Medical Scientist

Thank you for the opportunity to share this boat race with you!

"Medical science has made such tremendous progress that there is hardly a healthy human left!" *Aldous Huxley*

NZIMLS Executive Officer, Fran van Til, received the following emails from Joe Sullivan, who was unable to get back to New Zealand in time for the Annual Scientific Meeting:

"It is a privilege to be asked to make an appearance and present Jillian Broadbent with a certificate for giving the TH Pullar address.

Congratulations Jillian on "Bringing home the America's Cup" I hope that you enjoyed doing this as much as we did.

.....please make sure my congratulations get to Jillian for her amazing work. She truly sounds like an inspiring woman that I hope to meet some day.

Joe Sullivan, Emirates Team New Zealand"
