

From Silk Sutures to Steam Sterilisation

HOW A SPECIALIST VET SURGEON FROM MELBOURNE
IS HELPING COMPANION ANIMAL PRACTITIONERS
IN VIETNAM TO REACH THEIR POTENTIAL



OVER THE PAST FIVE YEARS THE ASAV HAS BEEN PLEASED TO SUPPORT THE WORLD SMALL ANIMAL VETERINARY ASSOCIATION'S (WSAVA'S) CONTINUING EDUCATION PROGRAM IN VIETNAM.

The program aims to deliver practical, relevant and inspiring continuing education (CE) for first opinion companion animal practitioners where access to high quality CE is limited. It is particularly beneficial in assisting practitioners to solve clinical problems regardless of the size and sophistication of their skill set, practice and budget.

One of the specialists involved with the WSAVA's CE projects in Southeast Asia is Dr Arthur House, a specialist small animal surgeon who works at the Veterinary Referral Hospital in Melbourne.

In addition to his clinical work, Arthur is passionate about veterinary postgraduate training and regularly gives back to the veterinary community through continuing education lectures, authorship of clinical research, mentoring vets in internship programs and his work with WSAVA. He is also the author of several textbooks.

Arthur has previously worked as a lecturer in Small Animal Surgery at the Royal Veterinary College (RVC) in London, and in recent years, has made two trips to Vietnam to support WSAVA's CE initiative. He has also worked with the WSAVA to help general vet practitioners in Myanmar and Thailand improve their veterinary knowledge and skills.

Companion editor Heather Vaile asked Arthur to tell us about his CE work with veterinary practitioners at Nong Lam University in Ho Chi Minh City in 2014 and 2016.

How did you get involved in doing volunteer work for WSAVA?

I was a lecturer at the RVC with Jill Maddison and Jill heads up the continuing education program over there. She has also become involved with the WSAVA and she essentially asked me if I'd be interested in lecturing in Vietnam and other countries.

I was interested to do it, so off I went and it turned out to be a bit of an adventure really.

I've done a lot of lecturing over the years in the UK and Australia, and back in 2007,

I had an opportunity to lecture in Thailand and the reception was fantastic. Helping a community of vets gain access to modern or updated veterinary care was a privilege. They're so grateful for what you can offer and it's just very rewarding to do.

In Thailand, their veterinary services are now relatively state of the art, so the lecture I gave in 2007 would now be relatively redundant because they've moved on. And that's what these communities are like – any opportunities they get, they make the most of it.

So, having had that experience in Thailand, I felt that the people in Vietnam are probably in the same situation, and they just can't get access to updated veterinary information. They do their best, they often have relatively out-of-date text books, they have no access to specialists, so when you do offer them help, they sit and listen and then put into practice what you talk about.

They're also quite ingenious and very able to make the most of what's around them. They're extremely resourceful. You show them a product and they'll go and make it or find someone to make it or try to import it.

They have really significant cost restraints with regard to what care they can provide, so they have to find a way to provide the care but within a budget that, in some cases, is incredibly stringent. So they are just a very, very rewarding people to teach because they are so keen to learn.

It's a very satisfying process.

Also, I'm extremely privileged – I've had advanced veterinary education in the UK, I've had people mentor me and having now taught residents myself, I know that the work and effort that you put into developing people is huge. So I think now it's only fair that I give something back.

Did the vets you were teaching in Vietnam speak English or did you have to work with a translator?

The Vietnamese understand a degree of English but it's all done through translation. I say a sentence and then the Vietnamese university lecturer says a sentence.

Fortunately, in Vietnam, the translator is a man who's one of the professors at the university and he's spent time in Europe doing an internship-year/masters (or similar), so he has very good English. He's also a surgeon so he has a very good understanding of what I'm saying. His translation is probably very accurate.

He's also the nicest man in the world. He's fantastic. He translates all my PowerPoints as well. So the poor guy, he's head of department or equivalent, and then he spends all night for weeks on end translating all of my lectures!

These guys work *incredibly* hard.

And he only ever smiles. He's never once complained about anything. He's truly a lovely bloke.

Was the standard of veterinary care over there about what you expected?

I thought it would be fairly basic. Vietnam was about what I thought it would be, whereas Myanmar was unbelievably basic. Myanmar is desperate. They have very few skills.

Vietnam had a level of skill sets that I could teach them beyond just sewing skin. Whereas Myanmar, my first lecture series there I felt like I probably had missed the mark a little bit because they perhaps needed something even more basic.

You learn little tricks and often what's most beneficial to them, is the totally unexpected.

So, for example, when I was teaching in Vietnam, I asked them to bring their surgical kits with them to the practical. And I just walked around the room, looking at their kits and telling them what the things were in their kits, like "Do you realise that that's this? And that's this?"

And then I'd be saying them, "Look you'd be much better off if you got one of these." So I'd go and find someone with a more appropriate instrument and then I'd show the group, "Look this is a better instrument to buy. If you're going to buy anything, buy this one, don't buy that one."

They did have surgical instrumentation and they certainly had baseline surgical skills but their skills were highly variable. So they knew suture patterns and they knew basic surgical principles. But the other problem they have is even getting suture materials is challenging. Either they can't get hold of them because they don't know where to buy them or the cost is an issue. So they have to use silk.

The really striking feature is the desire to improve and provide quality care. It's so strong.

They are desperate to do better and to improve what happens in their country. They're very proud of their country and they want to succeed.



Arthur House (in the dark navy scrubs) and Alasdair Renwick leading a practical class for small animal practitioners at Nong Lam University in 2016



Did you see a lot of variation in the skill sets of the vets you taught?

It was very varied. There's a group in Ho Chi Minh City that's pretty sophisticated and they've fitted out buildings that you would say, "Well that looks like a veterinary practice." And then you'll be talking to guys whose surgery is their house and they'll spay a dog on the kitchen table.

So this is where you've got a little bit of a discord. For some of these guys their skill set might not be great but their knowledge can be good – never underestimate their knowledge.

The other problem they have is that their knowledge may not be terribly well applied. So they might have read about it and they're trying to read about it but they might have slightly misinterpreted how to apply that to the patient care. For many, they have a table and a scalpel blade and some silk and some sort of intravenous anaesthetic and that's about it. So they haven't had the opportunity to put in place what they've read about and they haven't had the opportunity to have information they've read about put into a structure that then makes sense so they can use the information.

It's an interesting sort of mix. They can have this really in-depth, technical information but they have no idea how that should be applied. They've read it in a book, and they read everything that they can get hold of, but they've never actually had instructions to go "That's what that means."

That's part of the real value of what we do. You come and show them cases and talk through why you made the decisions you made, and they go "Oh, OK! That's what's going on here."

And that comes out in the practical discussions.

Here's a really good example: The second time I went to Vietnam with a colleague and friend of mine and we did orthopaedics. And we're talking about bone plates – but we didn't talk too much about them because we knew that they wouldn't have them. We kept the majority of our presentations focused on external skeletal fixators and intramedullary pins which are much more accessible and they can more or less make their own, using local blacksmiths.

Before you go, you have to think to yourself, will they have access to this technology or not? And what's the most versatile approach that we can talk about, so that the guy who works out of his house and only has minimal kit can actually take home and use?

Plating is a little bit problematic because it's really quite expensive to set up a decent plating system, whereas an external fixator is very cheap to set up and really versatile for managing fractures.

Anyway, after the presentation on plating, we're talking to the delegates and a guy shows a picture of a dog and he's put a plate on the dog's leg and he's put a plaster cast on the dog's leg as well. And that's a fantastic example of where he's had some knowledge but very poor application. Because if you plate a dog's leg, the whole point of doing it is so that you don't have to rigidly externally support it afterwards and the dog can walk on the leg and its muscles and tendons stay in good health.

So he'd sort of contradicted himself because he'd put a plate on it which was good but then he'd gone and put a massive plaster on it which meant that there was no point in putting the plate on.

And that's what you find out when you're there. You give a lecture and it's hard to know how they took it and then the conversation starts and you go, "Wow, look at that! These guys are getting a realisation that 'maybe I should be thinking about it differently. Maybe I've misinterpreted what I've read.'"

It's very, very rewarding.

Did you see any problems while you were there that really stood out in your mind?

There's a lot of problems over there. There's problems with basic aseptic technique, there's problems with pain relief (opiates are not or minimally available), there's problems with getting the appropriate medications and there's always a knowledge issue too.

I found that often in these circumstances, that wherever I've gone, there's a tendency to try and do something really fancy and not realising that doing the basic level care will get you a better result.

That dog that had its bone plate put on, and then a massive plaster cast (and I mean a Plaster of Paris cast!), the dog looked like it'd been mummified, more or less. It was a great example of how it had all gone a bit wrong and was not great for the dog's welfare at all.

And the first time I went, people would come up and show me a huge wound – like a 10 cm hole in a tiny dog – and they'd covered it in petroleum jelly expecting it to heal. And I'm like, "No, don't do that. Please don't do that."

It is a real problem.

Here's another example: The first time I went, I talked about sterilisation and I was encouraging them to use steam sterilisation because in a very basic form, you can convert a pressure cooker into a sterilisation unit. Because it has a lid and you pressurise

the system, it actually produces a high enough temperature and enough steam to sterilise equipment. And in fact, I've even seen them used in England when I worked there as a general vet.

So a pressure cooker is a type of autoclave and so that's something that they would be able to buy.

Anyway, they said "Well, what about drills?"

And I said, "Well you can't steam sterilise a drill because it's electric and it won't work."

So then I said, "So what do *you* do?"

And they said, "Oh well, we put the drill into a tin box and we then add potassium permanganate to formaldehyde and I was like, "*Whaaat?* I've never heard of this."

When I got home I looked that up and it was from a publication written in 1900. And essentially, the publication was about how much potassium permanganate can you add to formaldehyde before you will blow yourself up? It creates formaldehyde gas which is massively carcinogenic – you do not want to breathe that in – and if you do, you're not going to live long.

But at the same time, it kills everything. So it is an ancient form of sterilisation that was described in the 1900s and that's what they were doing. And I thought "Oh my God, they're going to blow themselves up or kill themselves with cancer."

It just shows you the lengths that they'll go to try and work within what they've got. But ironically, steam sterilisation, which is vastly superior and more appropriate than anything else (apart from electrical equipment), they had completely overlooked as an option.

Did you notice any improvements from when you went to Vietnam in 2014 and when you went back in 2016?

Absolutely – and across the board.

But there's been other lecturers going out there too. Nong Lam University has some relationship with Queensland University that they've generated or established for the undergraduate program and WSAVA continues to support the postgraduate vets.

I saw some of the same vets when I went back in 2016 and I actually bumped into some of them when I was in Thailand for WSAVA's annual international conference. And they were like, 'Oh, Dr House! How are you?'

They come back. They're certainly keen as mustard and you see the same faces again.

And it's not just the Vietnamese. A guy from Nepal had flown in and caught a bus or somehow got to the lecture series. There were people from Cambodia, these are all countries that are trying to get access to the education. So if they can afford to go and they hear about it, they'll turn up.

And they love taking photos. At the end of the conference, we always have the group photo and you have to sit in the middle and that's very important to them, so you oblige of course.

Then afterwards, they all want a photo with you one-on-one. There's probably an hour of photos at the end, so your smile is dying off rapidly! I found it a bit embarrassing and overwhelming but it was funny.

What's your strongest memory of your time over there?

The people. They are truly delightful, and actually through this work, I have built this relationship with the professor who does the translations. Each year now I take two students from Nong Lam University who come and stay for eight weeks and do a work placement at my hospital.

They are fantastic.

They are final year vet students and they are phenomenal. Within a week, they are as good as any one of my nursing team – and my nurses are well trained and have worked for me for a long time.

And you cannot get them to leave the hospital. Their minds are open and they are just like sponges. They want to take in anything and everything they can to take home with them. And they're beautiful people too.

Their hospitality is ludicrous. They come with bagloads of gifts, it's just embarrassing.

They're so polite and their appreciation for the opportunity is so transparent. In the eight weeks they're here, they see a vast amount of techniques but more importantly, they are so keen to get involved.

And they're going to do five times more than what you ask because they look at it as "I will never get this opportunity in my lifetime again. Every *moment* of this eight weeks, I'm going to be trying to get something out of it."

And they do.

They look at our library of text books, will pick something up and say, "Can we borrow this tonight?"

There's actually an opportunity for other practices in Australia to reach out and offer similar workplace opportunities to Vietnamese students – as long as you're prepared to teach. They come and you teach them and then it all works well.

Is there anything else you'd like to say about your CE work with WSAVA?

Just never underestimate these communities – whether it's Vietnam, Myanmar or Thailand. They are very, very passionate about what they do.

Don't think of them as behind or struggling – they always find a way.

WSAVA CE PRESENTERS IN VIETNAM 2013-2018:

2014

Arthur House from the Veterinary Referral Hospital, Melbourne

Topic: soft tissue surgery

2015

Jill Maddison and Kate English from the Royal Veterinary College (RVC) in London

Topics: clinical problem solving and clinical pathology

2016

Arthur House from Melbourne and Alasdair Renwick from Scotland

Topic: surgical management in trauma cases

2017

Randi Dress from the RVC and Richard Lam from the Small Animal Specialist Hospital (SASH) in Sydney

Topic: diagnostic imaging

and

PLANNED FOR NOVEMBER 2018

Meng Siak from Murdoch University in Queensland

Topic: dermatology