Neutering strays in India

A closer look at equine metabolic syndrome

Farming features: owning a flock as a student, milk price mayhem and more
Creating a community
Promoting equality
Providing support

BVLGBT is open to anyone wanting to support lesbian, gay, bisexual and transgender rights within the veterinary professions.

We aim to create a fun social network that promotes fairness and equality, and provides support for individuals both working and studying.

bvlgbt@gmail.com
The best bits of being a vet student

By Jordan Sinclair, JAVS Editor

Some of the best things about being a vet student are the opportunities available to the select group of us that decided we wanted to enter this profession. This issue explores just some of them – EMS especially presents a wonderful array of ‘different’ placements that not only help you gain the required clinical skills and on-the-job knowledge, but more importantly (I believe) provide countless life experiences. I’ve been lucky enough to do a fair amount of EMS abroad (clinical and preclinical) and, alongside the veterinary knowledge and skills I’ve picked up, I’ve also made countless friends from all walks of life, made contacts all over the world and learned to keep a grip on reality when all hell breaks loose and entire plans fall apart.

EMS is compulsory, and takes up a significant proportion of our time, essentially equating to another year of study squeezed into our precious holiday time, so you may as well make the most of it and have fun along the way.

But there are other opportunities out there too, such as stewarding at one of the many veterinary conferences throughout the year, getting involved with one of the International Veterinary Students’ Association exchanges, attending AVS Sports Weekend or AVS Congress (the highlights of the vet student year) or even something as simple as trying a new sport.

Being a vet student can be a free pass to get your foot in the door for all sorts of cool experiences – none of my non-vetty friends from home have played shinty or taken blood from a lion!

We’re here to become vets, yes, but milk it for all it’s worth and make the most of your time as a student – it’s better to regret the things you did, rather than those you didn’t.
British Veterinary LGBT

By Harriette Smart, LGBT+ and Wellbeing Officer (2nd Year, London)

On September 25, the British Veterinary LGBT+ held its first meeting at the BVA’s headquarters in London. With over 30 people in attendance, including the BVA president and a representative from Stonewall, the group has done well to raise awareness in the short time it has been running.

The British Veterinary LGBT+ group was set up by Mat Hennesssey in June after seeing a medics flag at London Pride. He recognised the need to set up a veterinary LGBT group as there was a need for support and representation within our profession. LGBT+ stands for Lesbian, Gay, Bisexual and Trans(gender). The + relates to other sexual and gender identities; for example, pansexual, asexual, intersex, polysexual etc.

BVLGBT+ aims
■ To provide support for those that need it by creating a network whereby people can ask for advice if they want to.
■ To have our profession become part of the wider LGBT+ community so that we help fight stereotypes and reinforce the normality of LGBT+ individuals in society.
■ To march at London Pride 2016, bringing our veterinary LGBT+ community together.
■ Creating a community by putting people in contact with each other online and at meet ups.

The then BVA president John Blackwell said: ‘This is a forward-thinking and much-needed initiative, and one that the BVA is proud to support. The formation of the British Veterinary LGBT+ sends a clear message that the veterinary professions and organisations such as BVA welcome diversity and will fight for equality.’

Within the time that the group has been running, it has received a massive amount of support with over 300 people having joined the following on Facebook and Twitter:

If you’d like to contact or get involved with the British Veterinary LGBT+, details can be found on Facebook and on Twitter (@bvlgbt) as well as by e-mailing bvlgbt@gmail.com.
What is SEVA and why should you join?

By Oliver Newman, Equine Vet Soc Coordinator (4th Year, Nottingham)

The Student Equine Veterinary Association (SEVA) is a national association of equine academic clubs at UK vet schools. Our main focus is to increase knowledge of equine medicine for all students. We also want to help educate people on the equine industry at large, and the scope of roles that vets play within the industry. In short, if it is equine related, we aim to help.

As a club we have been growing rapidly. The inaugural SEVA meeting, was held at the Royal Veterinary College, where delegates were appointed from all of the UK vet schools. Our follow up meeting in Bristol the following year was an extremely popular and successful event. The next SEVA symposium will be held in Nottingham from January 29 to 31, 2016. Equine professionals from many areas of the industry will help educate and enthuse the next generation of equine vets in what is set to be a fantastic weekend.

As we are primarily an academic association, our focus is to enhance the equine teaching we receive. Our members have varied backgrounds and all are equally keen to learn and to help others.

So, whether you adore all things equine, or just need to top up your equine knowledge to see you through exams, come along and get involved. There are branches of SEVA in almost all of the UK vet schools. To discover how to get tickets for the SEVA symposium and become involved with the society, and attend the symposium find our SEVA page on Facebook or email us at svyoen@nottingham.ac.uk.
Ever thought of being a student steward at BEVA Congress?

By Ruby Cox (4th Year, Bristol)

The British Equine Veterinary Association holds its annual congress in September and each year it invites its student members to volunteer for the event. Students, practising vets and academics from around the world will gather in Birmingham for BEVA Congress 2016, and if you’re interested in equids you won’t want to miss out.

Why be a student steward?

■ It won’t cost you a penny as all expenses are paid – from transport and accommodation to food and drink – everything is covered.
■ BEVA attracts world-renowned vets to speak on a range of topics. With five lecture halls to choose from, there is something for everyone. Once you’ve been assigned your rota, you’ll be free to fill the rest of your day finding out everything and anything you could possibly want to know.
■ Fancy an equine career? If so, your future boss is more than likely to be at BEVA congress. Get networking and take the opportunity to find out what it is top equine practices look for in their employees. It also gives your CV a boost.
■ Want to work abroad? With vets attending from all over the world, congress is the perfect place to get your questions answered over a glass of wine at one of the many evening events.
■ Grab your best black tie outfit as Friday night hosts the annual dinner. This alone is a good enough reason to steward. Three-course dinner; bar; live band; DJ – what’s not to like? Go steady on the wine though, you will find yourself dancing amongst some of the top equine clinicians!
■ Make friends – you will be working in a close-knit team with students from other vet schools in the UK and further afield. It’s a great way to meet like minded people and who knows, maybe you’ll be colleagues in the future.
■ Stock up on freebies – in the exhibition hall you’ll find stands covering everything from equine equipment and tools to veterinary services and charities. Take the chance to fill up your free bags with stationery, sweets and chocolates and don’t forget to enter the many prize draws.
■ Stewarding may count towards your EMS. Last year many universities accepted it as part of the quota.

There’s lots of fun to be had but being a student steward also comes with important responsibilities. You’ll be working in a team of around 20 stewards to help set up the exhibition stalls, man the reception, aid speakers and delegates and ensure that everyone and everything is in the right place at the right time. It’s a busy week but it’s a great experience and hugely rewarding.

If you are interested in applying to steward at congress 2016 please contact lara@beva.org.uk – applications close on December 31, 2015.
There are many physical dangers associated with dairy farming that are common to most farms. Such hazards may be associated with heavy machinery, such as tractors, or the animals themselves, which have the capacity to injure or even kill unsuspecting students. But in this article I will talk about less visible and less obvious dangers, such as those of a chemical or biological nature.

Vet students are warned against dangers on dairy farms but often this is not explained in enough detail. Students may feel they are only at risk from infection if they have a compromised immune system (for example, during pregnancy), or may underestimate dangers such as slurry gases, which could be ignored as just another bad smell on the farm.

Although there are physical dangers associated with slurry, such as falling in and drowning, the noxious fumes emitted pose more of a concern and have been responsible for the death of hundreds of animals and several people over the past few years (The Guardian 2012). This mix of gases includes methane and carbon dioxide, but also the rather nasty, hydrogen sulphide. Exposure can be particularly dangerous due to desensitisation upon high concentrations. Nausea, loss of consciousness and death can result when this concentration reaches a critical level (HSENI 2012).

Precautions can be taken to avoid potentially lethal concentrations of this gas. Outside slurry is generally safer than indoor reservoirs. Entry to underground reservoirs should not be attempted – lost items will have to remain lost! If a person falls in, rescuers should avoid going in after them, or at least wear special breathing apparatus. Vet students should notify to the farmer if they feel ill when working with slurry and move to fresh air as soon as possible. Medical attention may be required (HSENI 2012).

While slurry gases sneak up on you, at least you can smell them coming.

Where infection is concerned, clinical signs could be your first realisation that maybe you should have rinsed your mouth out after that cow splatted slurry in it! While farmers and their families have immune systems adjusted to the pathogens encountered on their farm, vet students are less well protected and therefore are much more susceptible. Zoonotic infections include parasitic nasties such as Giardia and Cryptosporidia, bacterial infections range from salmonella to leptospirosis, and viral infections include the unpopular norovirus.

A colleague of mine fell ill upon finishing his placement – showing clinical signs including vomiting and diarrhoea. Upon tests it was discovered that he had had cryptosporidiosis. Another colleague contracted the same infection, but fared worse being hospitalised for two weeks. I spoke to another vet student who told me about his experience of norovirus infection. Diarrhoea and vomiting was again the result of that infection. These cases gave me an indication of how commonplace infection of vet students on dairy placement seems to be.

But how can we avoid these biological hazards? Well there are several ways and this list is by no means exhaustive.

- Make sure you wash your hands thoroughly after examining or working with animals (especially before eating).
- Try to limit exposure to slurry or saliva.
- Good first aid should be practised to avoid infection through cuts.
- Protective clothing should be worn (boiler suits, overalls).
- Sick animals should be isolated, treated and handled with caution.

There are many other ways in which the risk of infection can be reduced and it is worth researching these methods before visiting a dairy farm. Further research is definitely warranted to examine the true number of students who pick up zoonotic infections from dairy farms. Some of these diseases seem to be being disregarded.

References and further reading
The Wishaw Woollybacks

By Jennifer Cooper (4th Year, Edinburgh)

I’ve always enjoyed lambing and, after a sheep handling class in the first year of vet school, I started thinking about the spare field at home on my boyfriend’s arable farm. The field in question was protected, rendering it useless for crops, while needing a lot of work to keep it looking presentable. I felt it was perfect for sheep.

After some gentle persuasion and bribery, my boyfriend’s dad agreed to let us fence the field and buy a few sheep. We spent weeks trawling county shows and researching sheep breeds to find one that would suit us. Eventually we settled on Polled Dorsets, having been drawn to them by their docile nature, their ability to breed three times in two years and because they were good mothers. But most of all we found them aesthetically pleasing. Our small flock of 16 arrived on the August 1, 2014, and The Wishaw Polled Dorsets affectionately known as the ‘Wishaw Woollybacks’ were born.

We hired a pedigree Dorset tup to get us started and carefully counted days to try to ensure that lambing fell within my Easter holiday period, while avoiding EMS placements. At the start of lambing were terrified. Yes, I’ve done the same as any other vet student and been on lambing placements where the farmer would be just a phone call away if help was needed. However, here, I was supposed to be the experienced one.

As lambing got under way our nerves settled down, we adjusted to the lack of sleep and muddled our way through. Like anybody else we had our ups and downs – one of the highights being lambing one of the ewes halfway through the main course of Easter Sunday lunch – wearing our Sunday best, with the entire, extended, family watching. By the end of lambing, we had been rewarded with six ewe lambs, which would remain in the flock and eight ram lambs, which would be sent to a local butchers to supply friends, family and the local community - lamb and mint sausages being a particular favourite.

We have recently increased our flock by 50 per cent after gain-
ing some more land. The aim is to expand the sausage side of sales, trade at local shows and sell our homebred ewe lambs on the pedigree market.

In the meantime, I’m working on getting a cow but I’ve had no luck so far, although I did get a tup for my 21st birthday!

For more information or to contact us, visit our website at: www.wishawpolleddorsets.co.uk or search for The Wishaw Polled Dorsets on Facebook.

Farming, another language?

By Daniel Tobin, Junior Rep (3rd Year, Dublin)

I come from a farming background in the middle of nowhere in Ireland, and I am used to dealing with farmers and talking to them on a daily basis on various topics.

Since coming to veterinary school, I have noticed the diversity of students on the course. Talking to my peers, I have found that not everyone is suited to large animal practice. Personally, I don’t see myself being suited to small animal practice but I know at some stage in my career I will have to work at a small animal clinic. Thus, I try and see as much small animal practice as possible, so I can become more used to dealing with the clients and more sensitive to their needs. However, on a dairy farm out in the country, perhaps, sensitivity is not such an issue.

As I said, not everyone is suited to large animal practice. Those from urban areas can find farmers intimidating. But to qualify, one will have to consequently immerse themselves in the situation. Talking from experience, there are little topics that every farmer loves to talk about. Farmers like to think they are constantly being hindered.

The weather

The weather is probably the key topic when talking to any farmer. Actually in general with anyone, it can be brought into conversation – even when trying to chat up someone in a club.

Farmers, especially, love to complain about the weather. If it’s bad, which, consequently, in Ireland it is 90 per cent of the time, they are crying out for some dry weather. And if it’s too good for too long, they demand a drop of rain. One can understand this though, as the weather plays a major part on their income at the end of the year. So
you should be able to manipulate this into any conversation. A knowledge of the forecast for the next week is also not a bad thing to have at the ready.

The price of milk/beef/grain
Farmers constantly feel that they are not getting enough money for their commodities and, from studying agricultural economics for a year, I can see their point. For example, there is major volatility in the dairy market due to the abolition of milk quotas across Europe. Today the milk price in Ireland is around 26 cents a litre, and yet shops seem to be charging around €1 for a litre of milk, so one can see why farmers may feel slightly outraged. One farmer I spoke to gave me a short but accurate insight. He said “every other business buys in bulk and sells in small amounts, whereas every farmer sells in bulk and buys in small amounts”.

Most farmers believe they are poor, so to keep on their good side it may be best not to disagree. In my opinion, it is a good idea for vets to be informed about the various goings on in the various agricultural markets as best one can.

‘Every other business buys in bulk in sells in small amounts, whereas every farmer sells in bulk and buys in small amounts.’

Animal care
From talking to farmers, I get varying opinions on their views of the vets in my local area. Many farmers like to be informed on exactly what is going on with the animal. However, you should not use too many veterinary terms, because if you are able to explain the problems of the animal in a simple language that they can understand, they will like you better for it.

Farmers may nod away agreeing with you, while not understanding a thing that you’re telling them. Keep it simple. Having said that, in the first few years of practice, you will find that often farmers know more than you do about the problem at hand, simply because they are more experienced. It is a good idea to explain which medicines you are giving and why, or some farmers may be reluctant to pay. I am sure you will gain this insight when on EMS, but just to inform you, farming is a business, so if it’s not economical to treat the animal it won’t be done.

In conclusion, don’t be intimidated, especially if you are female. From experience I know that some farmers think women are not as ‘able’ as men when it comes to getting the job done. Such views are changing, so let your expertise do the talking, and relish the challenge.
Dissecting the udder mess that is the dairy industry

By Joely Santa Cruz, Junior Rep (3rd Year, Bristol) and Georgie Lethbridge (Final-year, London)

Many dairy producers are selling their products at less than the cost of production.

Dairy farming in the UK, Ireland and the European Union is at a low point. Protests across Europe have highlighted the problems faced by dairy farmers, who are struggling to keep afloat, with the retail value of milk dropping drastically. Critically, it is now well below 30 pence per litre, which is generally accepted as the minimum a farm would need to be paid to survive. According to the most recent Defra figures, it was at 23.35 ppi in July.

There are several factors at play; supermarkets have been criticised over price wars and using milk as a loss leader while there is also significantly decreased demand due to the Russian boycott of Western produce. The global markets have added to the problem as many other countries don’t have to meet the high welfare and health standards of the UK. This has had a direct impact on the ability of farms to survive. In 2001 there were 20,991 farmers in the UK, whereas in January 2015, there were only 9,960. This position is clearly not indefinitely sustainable and could lead to a further fall in domestic production.

Some help has been forthcoming, with the European Commission announcing a £26.2 million direct aid package for the UK. This payment from Brussels will average at around £1820 to each dairy farm in England, with considerations made for the flat rate paid for that farm’s milk from 2014-2015, and should be arriving in two months time. This is a good result for direct action and farmers making their voices heard, however it is not the long term solution that many are seeking.

What is the problem?

Is it that milk just isn’t worth that much any more? Certainly we have to accept that the Russian market is gone for good (having built up a new supply base) and free trade within the EU means we can’t realistically stop EU imports. We no longer have milk quotas within the EU, and all of this combines to leave a surplus in supply in the world market. Milk prices are volatile in the short term, and while prices fluctuate it makes sense to support farmers so they don’t have to take all the hits on an individual level. Are prices artificially suppressed by competitive supermarkets? With the long term shifting of world markets, it is necessary to question if aiming to increase farmgate price would be passing on a false inflation to the consumer. Similarly, if using taxpayers money to build butter mountains, does that not just penalise the poorest in society by investing cash to artificially make a product less affordable?

However, there is a strong case for maintaining a British dairy industry. For one, British milk is produced to very high standards and much closer to its point of consumption. Transporting the millions of litres of milk Britain drinks every day from abroad would mean a huge, uncounted cost in carbon emissions.

An interesting point that is often raised is how it’s cheaper to buy milk than it is to buy water. On the one hand, bottled water could be viewed as a luxury product, as we have easy access to clean and safe tap water in the UK and Ireland, whereas milk’s up there with bread as a staple item that we think everyone should have access to and should therefore be as cheap as possible, hence why most foods are VAT exempt. It’s equally ridiculous that something as basic and ‘free’ as water, which is easy to produce can have such a high profit margin when farmers are slogging away under what can be gruelling conditions for an absolute pittance. The majority of people drink milk regularly and consumers will drink more or less depending on price, so why can’t the supermarkets sell it for a price that reflects its real value and the amount of work that goes into producing it? It’s not just the farmer trying to support themselves and their families, whilst paying bills that have been rising as value has plummeted; they also have a herd under their care and have to do the best for their animals under these conditions as well. British and Irish farmers have high animal welfare standards which many take pride in, but can we really expect that welfare will be in no way compromised when money is so scarce?

What we can do?

Clearly supermarkets have a role in setting price expectations and their milk price is a large component of price comparison indices. As vet students, we can vote with our feet and only shop at the supermarkets that are offering a fair price to suppliers. Sainsbury’s got on board with a national advertising campaign (The Grocer, 2015). Morrisons introduced a premium brand called Morrisons Milk for Farmers, which the company said it would sell at a 10p per litre premium to its standard milk price with the premium going directly back to the farmers that supply the milk. The campaign will go into stores in the autumn. This will give consumers the choice as to whether they want to pay more to support the British dairies. A recent survey found that more than half of customers said they would be willing to do so.

We also need farmers to be paid
Does society condone the rise in equine metabolic syndrome?

By Becky Norton, Junior Rep (2nd Year, London)

Cases of obesity and equine metabolic syndrome (EMS) have been increasing year on year. This article discusses the symptoms of a horse with EMS and the potential reasons why numbers have been rising.

Diagnosis
Equine metabolic syndrome (EMS) is a multifactorial disease. The phenotype of EMS encompasses insulin resistance (IR), increased regional adiposity and laminitis; additional symptoms that may aid diagnosis include: hyperleptinemia, arterial hypertension, and dyslipidemia (Johnson 2002, Cartmill and others 2003, Houseknecht and Spurlock 2003). When diagnosing EMS, a combination of a physical examination and laboratory tests should be used.

Physical examination
The majority of equids suffering with EMS have fat pads in the tail region, behind the shoulder and within the abdominal region, in addition to a thickening around the nuchal ligament commonly known as ‘cresty neck’. These can be seen in Figure 1 above. Increased adiposity is believed to cause insulin resistance; although the mechanism has yet to be determined. There are, however, two popular theories. The first theory is that adipokines and cytokines – cell signalling proteins secreted by adipose tissue – down regulate insulin signalling pathways.
The second theory is that lipotoxicity occurs within insulin sensitive tissues due to the accumulation of intracellular lipids (Kashyap and Defronzo 2007, Summers 2006).

**Laminitis**

EMS is linked to pasture associated laminitis. Lush pastures are comprised of a greater percentage of non-structural carbohydrates compared with pastures seen earlier or later on in the season. Non-structural carbohydrates are broken down into glucose causing a spike in insulin levels. Figure 2 illustrates the two vasoregulatory effects of insulin.

These pathways are important in understanding the link between EMS and laminitis; studies of IR in humans have shown PI3K pathway is selectively inhibited whilst the MARK pathway is unaffected (Muniyappa 2008, Muniyappa and others 2008, Cusi and others 2000). If this research is applied to horses it could be suggested that spikes in insulin result in excessive vasoconstriction disrupting blood supply to laminar tissue leading to tissue degeneration (Mancia and others 2007, Cusi and others 2000). There are alternative theories bridging the link between laminitis and EMS; it has been suggested that elevated levels of inflammatory cytokines produced by adipocytes damage the laminar tissue- both theories require further research.

**Insulin resistance**

IR is the term given to a defect in the insulin signalling pathway of a cell. In a healthy horse, insulin would cause respiring cells to increase glucose uptake leading to a reduction in blood glucose levels; in horses with EMS, respiring cells do not respond to insulin resulting in hyperglycemia (elevated blood glucose) which in turn causes up-regulation of pancreatic insulin production leading to hyperinsulinemia (elevated levels of insulin in the blood)(www.thehorse.com). During the diagnosis of EMS, patients are tested for hyperinsulinemia and hyperglycemia by measuring the basal serum insulin and glucose concentration and by various tests including: oral sugar test, combines glucose-insulin tolerance test, and insulin modified frequently sampled intravenous glucose test. More detailed information about the tests mentioned can be found in the article ‘Scientists Compare Insulin Resistance Test Options’ (www.thehorse.com).

IR is associated with adipose tissue. Firstly adipose tissues produce adipokines and cytokines that are believed to down regulate the activity of insulin signalling pathways (Kashyap and Defronzo 2007, Summers 2006). Secondly, when the storage capacity of adipose tissue is exceeded, non adipose tissues – such as the pancreas, skeletal muscle and liver – will begin lipogenesis. Non adipose tissues utilise fats via beta oxidation to produce lipids. However, high levels of lipids are known to be toxic to cells and interfere with cell signalling pathways- including the insulin signalling pathway(Kashyap and Defronzo 2007, Summers 2006).

**What can be done?**

**By Owners?**

Owner management practices could be a contributory factor to the increase in cases of EMS, because there is potential scope for misunderstanding surrounding the optimum weight of a horse and its nutritional needs. Research suggests seasons are an important aspect to consider when feeding horses; in a natural environment EMS may have been an advantage as it allowed horses to store energy as fat in the summer to use for the winter months when forage was not easily accessible. However, in modern management feed levels often remain consistent all year round (Dugdale and others 2008). It could be suggested that feed should be decreased during the winter months to mirror horses’ natural diet.

Another issue is the high levels of glucose in the feed. Further research should be carried out into how we are feeding our equids; and research could look into potential health benefits of altering feed intake during the seasons to mirror the natural diet in native breeds that are prone to developing EMS.

**Show judges?**

Overfeeding has become common practice in preparation for showing. It is recommended that suckling foals should receive 16 per cent crude protein creep feed from three months of age to one-year-old (Feeding and growing young horses 2015). However, in some cases, these youngsters are being fed an 18 per cent crude protein feed to increase their growth rates. Pushing foals can predispose to endocrine disease, laminitis, decreased fertility, as well as a range of skeletal ailments. Overfeeding appears to be present in all age groups of horses being shown in hand. In the
Welsh cob, for example, it could be argued that the judging criteria for the breed is outdated. Before the development of the tractor, the breed worked the land and would have naturally developed a greater mass of muscle than today’s cob. Are modern breeders trying to maintain the size of the Welsh cob they perceive the judge wants to see.

**Equine veterinary practice?**

In small animal practice one of the first tasks of any consultation is to weigh and body condition score the animal. However, this seems to be lacking in equine practice – why? Granted, carrying a set of equine scales around is impossible, but there are other aids that can help achieve the same aim, such as weigh tapes and body condition scoring scales.

There appears to be a lack of communication between vets and owners as to what is an acceptable weight and body condition score.

**Breeders and breed societies?**

Overfeeding of foals and yearlings in preparation for sales has become increasingly common in racing and in-hand show breeds to give an impression of maturity. This could be discouraged by making buyers aware of the risks associated with obesity, such as decreased cycling in mares.

In addition to informing their members of the risks of obesity, breed societies could help by introducing judging guidelines. This is particularly important in native breeds that have an increased predisposition to developing EMS.

Veterinarians and owners need to work together to ensure that horses are maintained at a healthy weight that is appropriate for the amount of work they do. The veterinary profession should ensure that the advice relating to obesity is consistent.

There appears to be a lack of unity when tackling equine obesity and EMS. It is unclear why the number of cases has been increasing; however, judges, owners, vets, buyers and sellers all play a role in ensuring obesity is not acceptable within the industry.

**References**


'First do no harm' is a popular paraphrase from the Hippocratic Oath and, as instructions go, it's quite straightforward. If your treatment or intervention won't help the patient, then don't do it. The Hippocratic Oath is no longer used for many graduating medics, but its influence is undeniable.

The recent vote in the House of Commons posed a huge problem to the medical profession by asking if those suffering from a terminal illness, with less than six months left to live, should have the choice to end their life with the assistance of a medical professional. The British Medical Association is opposed to all forms of assisted dying, pointing out the 'principal purpose of medicine is to improve patients’ quality of life, not to foreshorten it'. There is a feeling that this is not what doctors signed up for; they are there to promote life and care for the sick, and by allowing assisted dying it would 'weaken societies' prohibition on killing'.

Passive euthanasia, where potentially lifesaving treatment is withheld, has been around for a while and is done at the request of the patient, as they always have the right to refuse treatment unless considered not mentally fit to make the decision. However, only 51 per cent of medics would accord to the patients wishes and only 16 per cent would do so if the patient had requested assistance in dying (Caralis 1992). More interestingly, 68 per cent of medics questioned agree that there is a moral justification for helping those who request assisted dying, yet only six per cent of those would be willing to administer drugs to cause respiratory arrest, and only 1.1 per cent would give drugs for cardiac arrest (Caralis 1992). Public opinion, in the UK at least, is in favour of assisted suicide, with 75 per cent saying there should be some form of assisted suicide, and only 13 per cent of the public opposing any change in the law (yougov.com).

So how do vets differ? Well we swear that our 'constant endeavour will be to ensure the welfare of animals committed to our care'. We swear to protect the animal’s welfare, and that will mean, at times, putting it to sleep. The lack of controversy over animal euthanasia may come from the traditional, and perhaps outdated idea of a pet being an object (Tuan 1984). Many would disagree and say their dog is a family member; and indeed the feeling of loss will be great, but you still buy a dog, and you refer to the client as the owner.

It is also consensus that few animals have a concept of time or future construction, so it would be wrong to put an animal through long term painful treatment even if it could prolong life — finding the balance between palliative care, treatment and when to end treatment is a fine line. The lack of concept regarding time also means that a pet dog, for instance, will not think of all the balls he will no longer chase, or the faces he can lick because he is about to die.

But a much less clear area of the impact of euthanasia is how it affects vets. We all know the mental health issues that surround the profession, with greater suicide (Ogden 2012), depression, anxiety and stress (Meehan 2014). These issues are influenced by pressures of the job that include putting animals to sleep. Many have, therefore, linked the liberal attitudes vets have concerning animal euthanasia to human suicide. Although the relationship is not as clear as that, with no proven relationship between attitudes towards convenience euthanasia (which nearly all vets disagreed with, but less strongly as they moved through from preclinical to practising) and human suicide or euthanasia (Ogden 2012). So perhaps the action itself has little bearing on mental health, but rather the stress and trauma it causes.

It seems many will agree it is right, to allow someone a choice over their own life, but no one will know who should do it. No one will know what effect it can have on society, and the physicians who administer the drugs, since although euthanasia in pets does not affect vets’ attitudes to suicide, the stress involved, may. I do not doubt the significance of ending a human life will weigh heavy on a physician’s thoughts. This is, undoubtedly a question to which there is no one clear answer, and perhaps not even a clear question.

References

Contributions to JAVS are welcome and should be emailed to: javseditor@gmail.com
It was a windy, bumpy road filled with potholes, and the vet was already pushing 60 mph. We both stank of iodine, and while I was busy holding on to my seatbelt for my dear life, the vet asked me the very question I dread: ‘So, why did you want to be a vet?’

I just hate that question – there is no easy way to put it. Shall I sound really naive yet be honest by shortening my answer to ‘because I like animals’, or shall I paint out a complete mosaic of all the reasons to make it really thorough but boring? Fortunately, the vet had her own point to prove:

‘Don’t give me the s*** about liking animals because the correct answer is you don’t like your life’.

While I wanted to laugh at her joke (she hadn’t reached that stereotypical ‘cynical’ age), I simply couldn’t bring myself to laugh with her. I most certainly do like my life, but ‘liking animals’ cannot, and should not, be a sufficient reason for choosing the profession we are entering. Yet, as a student ambassador, that is the most common answer I hear when I ask prospective applicants for their reasons for applying to vet school.

It is perhaps no surprise, therefore, that the recent finding by the Vet Futures’ project that only half of recent graduates say their career has matched expectations. There can be multiple ways to interpret this. The profession we are entering could provide such poor professional support, work-life balance, low starting salary, and so on, to make half of recent graduates unhappy in their career choice. Indeed, numerous articles since the release of the finding have focused on the need to improve professional support, not only after graduation, but during the educational phase of the profession.

An alternative explanation could be that these recent graduates simply had a different expectation despite all their pre-vet work experiences and their clinical placements in vet school. Perhaps many of us are simply disillusioned.

During one of my recent EMS placements, we had to put one of our patients to sleep. It is never a pleasant procedure, but we all understood the need, and I thought nothing more of it. The vet, however, dragged me aside later and asked if I felt okay. Seeing the perplexity on my face (it had been a few hours since the procedure), she quickly added that a previous student had been found crying in the toilet after she had witnessed a euthanasia.

It is hopefully not an exaggeration to say that many of us like animals. Most prospective applicants I speak to during careers fairs seem to support this notion. Yet, while we are expected to have an answer regarding the ethics behind euthanasia for our admission interviews, we have very little expectation on the mental effects of euthanasia from our applicants. What’s more, how much are we asked to consider regarding the mental effects of procedures that don’t go as planned or hoped?

The problem of professional dissatisfaction doesn’t originate from universities. Admission into veterinary medicine takes years of planning; therefore, we need to address the issue from the start. Disillusionment arises primarily from the public’s perception of the profession.

Until the public understands that veterinary medicine isn’t all about providing miracle drugs to cute puppies or kittens, until the public understands that veterinary medicine is a lucrative business at the expense of the clients, and until the public understands that it’s not all about James Herriot, we will continue to struggle balancing expectation and delivery to the future of our profession.
Military mutts

By James Bladon, JAVS Web Editor (Final-year, Liverpool)

Our canine friends are now well established members of the Royal Army Veterinary Corps (RAVC). They carry out a wide range of activities including counter insurgency operations, the detection of improvised explosive devices, assistance in the searching of routes, buildings and vehicles, enhancing security and patrolling key installations. The 1st Military Working Dog Regiment has a maximum capacity of 384 dogs, maintained and trained by 299 officers and soldiers.

The origin of the use of dogs in the British Army is a tale of discovery, heartache and sacrifice. Britain was late to the party in setting up an Army Dog School, owing partly to the War Office having little confidence in the usefulness of dogs for military purposes, which is staggering given how effective they have proved to be.

In 1916, Lieutenant Colonel E.H. Richardson was approved in setting up an official dog training school, taking in dogs from overflowing Dogs’ Homes and loaned from members of the public. Within a few days, 7000 owners had given up their family pets to the cause. Many of the letters were heartbreaking. One little girl wrote: ‘We have let Daddy go and fight the Kaiser, now we are sending Jack to do his bit.’

One of the first tests the dogs were subjected to in order to ascertain their suitability, was to be fed only while noisy grenades were thrown into a nearby pit. As hunger overcame fear, those who were going to be any good were straining at their leads as the first grenade exploded. Those who cowered in their kennels were returned home or sent to Dogs’ Homes to be euthanased. Initially used as messengers on the front, dogs battled through bullets and gas to take messages back from the trenches to command posts in the rear.

Their role was often underappreciated or ignored by commanders, and many were destroyed for being ‘useless’, regardless of their actual capability. When dogs arrived at the front, they were also adopted as companions by soldiers, which lay much of their training to waste. Even a cavalier King Charles spaniel (CKCS) made its way to the trenches – goodness knows how! As a CKCS owner, I can’t think of an animal I would less choose to send into battle. Despite this, many dogs served with distinction, and much better use of the dog followed in the Second World War. A number of dogs have earned the PDSA Dickin Medal, the animal’s Victoria Cross.

Let us never forget the vital and often underappreciated role these animals have played in maintaining our freedom. They showed courage, bravery and determination, and often led cruelly short lives.
Serum eye drops
Eye drops can be produced from the patient’s unpreserved blood sample. The result is a great non-allergenic, healing-promoting substance.

Another alcohol solution . . .
Whisky can cure the runs. A scouring foal was once being treated with little success. After trying everything, a small shot of whisky was gulped down by the patient, closely followed by a full recovery. This was enough to convince all those involved that it could be a revolutionary new tactic.

Don’t talk when expressing anal glands
Keep your mouth shut. Pretty self-explanatory. No one wants that.

Need a breast pump?
Being out in the field requires a little inventive thinking from time to time. Struggling with a foal that won’t suckle? Use a 50 ml syringe, remove the plunger and cut off the pointed tip from the barrel. Replace the plunger backwards into the cut edge; meaning the smooth edge can be rested on the mare when drawing back.

Vodka has healing powers
In a case of antifreeze poisoning (ethylene glycol toxicity), an animal can benefit from the administration of intravenous ethanol or a little oral vodka. It prevents the formation of calcium oxalate crystals in the kidneys, thereby assisting recovery.

There is a time to run
Procaine penicillin is a commonly used antibiotic in equine medicine; and it is associated with a reasonable incidence of adverse reaction. These reactions vary – but if suspected, get out of the stable as soon as possible and probably don’t watch as your patient gallops around it for the next 20 minutes.

‘Infectious’ includes you too
A quick way to assist with the diagnosis ringworm is by subjecting lesions to ultraviolet light, as it will fluoresce if microsporum fungi are present. This is also a helpful method for you, even if you don’t notice until you are under the UV light of a nightclub . . .

Water fights always end in regret
Dental equipment water fights may seem like a great idea when the practice is having a slow day. However, you only wind up cold and wet for the rest of the day and without a change of clothes. This, combined with the many sideways glances from suspicious clients, suggests a new pastime should be found.

Surviving your first year of vet school

By Isabella Hannay, Junior Rep (2nd Year, Nottingham)

When I joined Nottingham Vet School in September 2014, I didn’t know how I’d cope with being a vet student as I didn’t know what to expect. Now that I’ve completed my first year, I can pass on what I’ve learnt to this year’s new starters.

My first year was filled with highs and lows. I had a great time experiencing nights out with my new friends and finally learning about something that I’m passionate about and that will be relevant to my career as a vet . . . not forgetting the sense of achievement and satisfaction to finally be able to say you’re a real vet student.

However, there were also hard times, where I felt like I’d never get through it. These mainly involved the pressures of the academic workload. I was struggling to take in all the information presented to us and, as exams got closer, I got more and more stressed about whether I knew enough. However, this eventually led to one of the best moments of first year, which was when I found out I had passed my exams.

It’s often hard to know whether you’re doing enough work. You don’t get as much feedback compared with being in sixth form. Suddenly you’re faced with responsibility for your own learning, where it’s up to you how much or how little work you do.

Some students will love telling you that they’ve been doing 14 hours work a day and everything they know. This can be intimidating in group discussion and may make you
hesitant to speak out. Your opinion is just as important as theirs and you will possibly have picked up something that they didn’t from lectures or from your reading. Others will say they’ve done nothing other than play on their Xbox and go out every night. These are the students who, inevitably, get some of the top marks in your year. My advice would be not to listen to either. Do as much work as you can, while still enjoying other aspects of university life. You’ll probably do much better than if you were still stressing about how much everyone else was doing.

People learn in different ways so it’s important to experiment with different types of note taking and revision. I know some students who rely on OneNote and others who write everything by hand. First year is the perfect time to try out new techniques and find out what is best for you. Finding the right learning technique will free up some time for you to do more of the things you enjoy too.

As a vet student you will find you have a much busier timetable than students on other courses. I have often had to say no to my non-vet friend’s plans because of the much greater workload I had. This can make you feel isolated from the rest of the people in your halls so I found it easy to surround myself with vet students. This isn’t necessarily a bad thing but it’s nice to have a complete break from vet school and see different people who don’t want to talk about vet school. Although vet student friends are important to as they can empathise with the amount of work and often have the same interests as you.

It’s important to stay on top of lectures and studying but remember to balance this with social activities. This could involve having interests outside of vet school or just taking the time to relax. Try to join a university wide society or find an activity which will help you unwind. Taking a break from the pressures of vet school will make you less stressed so when you do work you’re likely to be more productive. Make sure you don’t stop doing what you enjoy in favour of extra work! However, don’t get too obsessed with having fun. For example, most people don’t work as well if they’re hungover so maybe don’t drink as much alcohol or come home earlier so you can fit work around having fun. It can be hard to say no to going out with your friends in favour of work but it will pay off in the end.

Talk to your friends and family about how you’re coping at vet school. Whilst tutors and vet school staff can be extremely helpful when you’re struggling, your friends/family know you better and will be able to give you advice most suited to you. Keeping a link with home will stop you getting too overwhelmed with the pressures of vet school and make your mum feel better too. Older students are great for discussing any issues you’re having with vet school. They’ve been through it last year so can give you advice and tips.

Be organised! This helps you balance vet school with the rest of your life and means you don’t end up working for 5 hours every night. Try and allocate a specific time slot to write up lectures and do any extra reading or note making. You can then plan other activities around work and you don’t end up forgetting that really boring lecture which will inevitably show up on your exam.

This same principle applies to organising EMS. Try and do this early so you can get a placement which fulfils all of your criteria (i.e. close to home/specific farm type you haven’t yet experienced). This means you can get the most out of your time on EMS and learn as much as possible. It helps if you communicate with your EMS host on what to expect. EMS is an important part of your first year, despite it being during university holidays, as this is the first time you go out in the public as an active vet student. Most hosts will give you more opportunities and information if you are willing to put in hard work to help. Maximise your experience by taking up any opportunity offered to you.

Have fun! There are so many great opportunities which come with being a vet student from the events organised by your university’s vet soc to AVS sports weekend. Get involved with as much as you can and you’ll have a great first year. Don’t forget that famous vet school saying— work hard, play hard!
Getting involved with anaesthesia on clinical EMS

By Charles Keys (4th Year, Edinburgh)

Anaesthesia is a challenging discipline, but it’s one area where you make yourself feel useful on placement in small animal practice.

Calculating drug dosages
Ask the vet if you can calculate and draw up the sedative or anaesthetic drugs for an animal. Committing dose rates of particular drugs to memory isn’t necessary as they will come with experience, and, if in doubt, you can always consult the formulary. What is important is getting good at actually calculating doses (sometimes quickly and without a calculator; for example in an emergency) and then drawing them up accurately with an appropriate needle and syringe. Remember to double check all drugs and dosages with the vet in charge of the case.

Familiarity with sedatives, anaesthetics and analgesics
Many practices have a ‘standard’ sedation or anaesthetic protocol for dogs and cats. This is common, in busy practices where there may be several operations taking place each day and there simply isn’t the time or resources to create a tailored anaesthetic plan for each patient. This can also be useful for you, as the vet student, to become familiar with particular drugs and drug combinations. It is often said that the safest anaesthetic is the one you know.

It is important that you also actively think about individual cases yourself. If you were the vet in charge, would you do anything differently? The ‘one size fits all’ approach is not always the best choice of technique. Perhaps you have seen a particular drug or drug combination used that you weren’t keen on; equally you may find a technique that you feel comfortable with. What interests me about anaesthesia is that there is rarely one approach or solution to a problem. If the opportunity arises, ask the vet to let you design your own anaesthetic plan for an animal, and effectively ‘manage’ the anaesthesia under their guidance.

Ask to place intravenous catheters
EMS provides an excellent chance to practise cannulation as practising this technique simply can’t be recreated on anything other than a real animal, regardless of how good the dummy leg is in your vet school’s clinical skills lab! I have found that most vets and nurses are more than willing to let you place catheters unless the animal is particularly fractious or having veins that are almost impossible to access.

Know your way round the anaesthetic machine and breathing circuits
EMS is the perfect opportunity to familiarise yourself with the workings of the anaesthetic machine. Practise choosing a suitable breathing system and endotracheal tube for a variety of sizes of patient to really appreciate the differences. Once this is set up, you could offer to leak test the system, check the level of inhalational agent in the vaporiser, as well as the level of oxygen in the cylinder – make yourself popular with the nurses!

Become a vigilant monitor of anaesthesia, including during the recovery period
As a vet student, this is definitely an area you can help the nurses with. It allows you to get used to filling in an anaesthetic record, which should ideally be done every five minutes. Also practice taking heart rates, respiratory rates and rectal temperature, feeling pulses and assessing depth of anaesthesia. Learn to recognise variations in these and what can be done to correct problems if they arise. Also get used to setting up and interpreting monitoring equipment such as ECG leads, pulse oximetry and capnography where you can – different practices use different pieces of monitoring equipment.

It is crucial to realise that anaesthesia does not end when the vaporiser is turned off and the vet goes off to get a coffee and write up their notes. In a study into perioperative death in small animals, postoperative deaths accounted for 47 per cent of deaths in dogs, 61 per cent in cats and 64 per cent in rabbits (Brodbelt et al, 2008). Good postoperative care involves ensuring the animal is pain-free, warm, comfortable and adequately hydrated. On placement, it is good practice to keep an eye on a recently anaesthetised animal after surgery, and shows you have thought about that animal’s welfare.

Don’t forget analgesia!
Anaesthesia and analgesia go hand in hand. On EMS, you could think about creating an analgesic plan as well as an anaesthetic plan – consider the likely degree of pain, which drug(s) you would use and their route of administration.

There are several postoperative pain scoring systems available for use in both dogs and cats; one of the most widely used is the Glasgow Composite Pain Scale, and it might be useful to familiarise yourself with some of the criteria used to assess pain in companion animals ahead of an EMS placement. This scale is available at http://tinyurl.com/pg6joey.

References
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The importance of vaccination

By Antonia Milner-Matthews (3rd-Year, London)

Picture the scene: a barren field except for huge patches of ragwort; broken glass, barbed wire and collapsed fencing, stallions and colts running with scruffy, underweight mares – many with foals already at foot. The reason for the vet call out is a red and white mare collapsed in a ditch at the edge of the field. The mare has been down all morning, possibly all night. The owners have been trying to get her to stand, to eat or even just to drink but she can’t open her mouth. The emergency indicator here is the word ‘lockjaw.’

A quick clinical examination confirms the vet’s suspicions; congested membranes, rigid limbs unable to support the horse’s weight, muscle spasms, a high temperature, laboured breathing and clear distress. The third eyelid isn’t protruding but the tail is elevated and there is inexistant vaccination status. All of the above point to tetanus. The mare’s foal keeps wandering over during the examination. She is only a few months old and still reliant on her dam.

The vet explains to the owners the potentially huge financial cost of medical treatment at the local equine hospital or back at the practice and the likelihood that the prognosis would not change. The owners, although keen to save the mare, opt to euthanase her as they don’t want put her through more suffering. The vet educates the owners about tetanus and they agree that the other horses will be vaccinated and that the foal will be given antitoxin as well to provide protection until the vaccination works. The long-term care of the foal is also discussed.

The owners are desperate not to let another horse suffer and need continuous reassurance from the vet that putting the mare to sleep is justified – that not taking her to the hospital is not just a financial decision. They are not uncaring, indeed quite the opposite, their horses are part of the family. The owners have been with the mare all day trying desperately to get her well. They had raised the money needed to treat her in a very short space of time but it was all in vain. Once educated, they fully supported vaccination and said they would tell others in their community about its importance, so no other horse has to suffer the same fate.

Where was this case? Was this some distant and exotic EMS, a case you wouldn’t see it in general practice in the UK? No, this mare was in Essex.

On EMS this year I saw a surprisingly high number of diseases that are preventable by vaccination, not just tetanus in horses but also cats with panleukopenia and severe herpes infections. Our goal as the next generation of veterinarians has to be to educate, to not forget the importance of ensuring that vaccination appointments are booked as well as the significance of the question ‘has it been vaccinated?’

VPH Master class

By Hannah Clifford, Senior Rep (5th Year, Cambridge)

In July, eight vet students from across the British Isles gathered in Glasgow for this year’s Veterinary Public Health (VPH) Masterclass, kindly supported by the Veterinary Public Health Association. The purpose of the week was to show us a wide range of different aspects of VPH, particularly those that get little exposure at vet school. During the week we visited various points of the food chain from animal rearing to a rendering plant, and spoke to people involved in VPH from a range of backgrounds. We met animal keepers, food producers, vets, chemists, medics and scientists and gained an appreciation of the network required to protect public health.

Each vet school was offered one place on the masterclass, and all of us had a particular interest in some part of veterinary public health. As a group, we got on like a house on fire, which made the week great fun, and led to some interesting discussions over wonderful shared dinners in the huge apartment that was VPH HQ for the week.

First stop on day 1 was Glasgow Vet School with a case study to work through to get us thinking, followed by a hands-on gun safety practical in the postmortem examination room. From there we headed off to the local knacker’s yard to see where fallen stock are processed to appreciate what actually happens when you tell the farmer to call in the hunt kennels/knacker man at the end of an animal’s life.

Tuesday’s visits were a little more lighthearted – a day trip to Blair Drummond Safari Park, where our
on we heard about the wild game industry, which is something that is usually only lightly covered in the VPH courses and was something that I personally had little knowledge of.

Thursday morning brought the much-anticipated visit to the fish farm. Howietoun Fishery in Stirling is a longstanding enterprise with a fascinating history. It now predominantly supplies young trout to restock angling rivers. This is another industry that I had no idea about beforehand our enthusiastic host patiently answered scores of questions and even provided us with fish for dinner.

Before we could tuck in, though, we had another visit, this time to a rendering plant – essentially the ‘end of the line’. Here they processed the bones and carcasses from the knackers’ yards to produce a bone-meal, which goes in to pet food. I think I would probably say that this was the most enlightening visit of the week – I had learned that waste is categorised and treated, and I had heard of the term rendering plant, but I hadn’t given much thought as to what might actually happen there. We saw the whole process and heard how the plant is operated for maximum efficiency. Another set of lectures tied firmly in my mind.

Throughout the week we visited many places that I would not have had the chance to otherwise. We met some great people who were very willing to answer questions and gave their time, so that we could understand their role in the VPH network.

VPH is a wide-ranging area, which is highly relevant in the real world and a better understanding can help shape your opinions on current veterinary issues. I would recommend that anyone who gets this opportunity next year takes it up – it is a fascinating week; huge fun and counts as EMS as an added bonus.

A big thank you from all of us to the VPHA for supporting the week and to those involved in its organisation, particularly Noelia Yusta from Glasgow Vet School who ferried us about all week and without whom it would not have happened.
When considering EMS placements, laboratory work may not be the first thing that comes to mind. This area is often neglected, but in many ways, it is not that different from working in general practice. A vet’s job is to treat animals in need and ensure they have the best possible welfare standards. Animals used in research can still have problems, in the same ways that pets do – they can injure themselves, get infections, and become ill. The difference is that in their case, instead of an owner being the deciding when to treat, it is the vets who are dedicated to treating them and ensuring that their welfare is top priority.

Animals are used in research for a variety of reasons. Animal testing can be important for developments in medicines and procedures that are used to benefit not only the world of human medicine, but also the veterinary world, to treat pets and livestock – as well as treatments for human diseases such as diabetes, asthma, anaesthetics used in surgery, and drugs to treat heart disease, depression, Alzheimer’s among many other conditions.

It is difficult to imagine how many vital vaccinations would have been developed without the use of animal testing. For example, it has been calculated that over 100 million animals were saved by vaccination against anthrax and rinderpest and a similar number were saved by swine-erisipelas inoculation.

More recently, a vaccine has been developed to treat pasteurellosis, a serious respiratory disease that used to affect up to one in five cows. Research to develop a vaccine involved testing being carried out on 450 calves, and yet over 100 million calves have now been given the vaccine, preventing about 20 million becoming infected with the disease.

Many people are under the impression that laboratory animals undergo lots of painful procedures, but often the procedures only involve taking blood samples, administering routine injections or observations. With more invasive procedures, vets ensure that the animal undergoes no unnecessary discomfort. Laboratory animals are protected under the Animals (Scientific Procedures) Act 1986, which means that any procedure that has the potential to cause distress or discomfort must be considered carefully and other available options should be investigated. The vet must also make sure that appropriate anaesthesia and analgesia is provided, that stress by handling is minimised and that after the procedure the animals are monitored and cared for accordingly.

The veterinary oath is taken by all vets and is just as relevant to laboratory animals. The vet appointed to their care is impartial to the experiments and the testing is irrelevant to them; therefore their job and number 1 concern is the comfort and wellbeing of the animals under their care.

Laboratory animals have allowed so many of the advancements we have seen in medicine over the years. They have allowed the development of cures and treatment for many conditions. Such monumental changes make a life-enhancing difference to people affected by them.

If more students took the opportunity to see practice involving laboratory animal, it would not only give students the chance to see something different, but might also start to change the negative outlook with which people view this important and crucial branch of science.

As one lab animal vet says: ‘This career does not mean that I turn my back on any part of the oath that I took on the day that I graduated. To the contrary, I believe that I have chosen the speciality in which I can have the single most important impact on animal welfare. And I couldn’t be prouder to be a part of such a wonderful and compassionate profession.’
This summer I was lucky enough to participate in the Veterinary Leadership Program (VLP), which involves spending 10 weeks at Cornell University in New York State, USA. I left for the course with trepidation; it was a long course, and I wondered whether the other students be intense and scary. However, I was amazed by just how incredible all of the 23 participants in the course were. As it turned out, we got on fantastically well, and that helped us to have the summer of our lives.

We lived together in a fraternity house, Zeta Psi. The communal living enabled us to become close friends, and, to an extent, gave us a flavour of American frat house life. In true vet school style, we worked and played as hard as we could. All weekdays were jam-packed with work, although it didn’t feel like work as everyone was so enthusiastic, and every weekend was filled with amazing trips. One guy even wondered if he could live off six hours’ sleep as apparently you can be way more productive that way (I think he has since decided sleep is actually a good idea).

Highlights
The VLP also involved various taught modules, including my favourite – the drug design workshop. During this workshop we were split into teams and instructed to develop a new drug to target canine atopic dermatitis. We then presented our business plan for our novel drug to the head of research and development at Zoetis.

During the program, I attended a biomedical conference at Cornell University, and visited the National Institutes of Health and Walter Reed Army Institute of Research. Here, inspirational scientists presented their research and we were given a tour of some of the country’s top research facilities. Following these visits, we had the opportunity to explore Washington DC, where we particularly enjoyed visiting the zoo, which is free to the public.

My research project consumed a large part of my time on the VLP, and, thankfully, I was lucky enough to be placed in a lab that studied embryology (my favourite). During my project, I worked with mice and learnt fascinating techniques including microdissection and in-situ hybridisations.

Overall, I had an incredible experience and made some great friends. I would recommend applying – you are missing out if you don’t! One other highlight is that the living stipend of $500 a week ensures that you can take every opportunity that is presented to you.
Neutering mayhem in India

By Jordan Sinclair, JAVS Editor (3rd Year, Glasgow)

Organising EMS abroad, travelling halfway across the world and reaching your destination is a feat in itself. Navigating once you get there, however, is an entirely new challenge, especially in a country like India.

Absolute mayhem is the only way to describe India – there are so many people – the roads are chock-a-block, the railways and buses even more so. Everything runs late, taxi drivers don’t seem to know where basic landmarks are (for example, the airport) and cows roam free in the streets. As tourists, we had the additional hurdles of the language barrier (although I think it was more of an accent barrier), harassment for photos (I now sympathise with celebrities) and being constantly on the lookout for scams.

Travelling in India comes with a certain amount of stress, but turning up at your EMS placement to be turned away, with the hosts claiming no knowledge of your booking certainly sends the old blood pressure through the roof. Needless to say, we were somewhat panic stricken. Using all resources that were available (slow wifi and a cramped phone box), we frantically sent out a distress call for help and, after a couple of days of Facebook messages, emails and phone calls, we had sorted a last-minute alternative. Having been stranded in Goa, we swiftly booked a flight to Delhi to cram in a bit of sightseeing before starting a placement in Jaipur.

After being sardined in the Delhi metro, getting completely lost by hair-raising rickshaws, and feeling imprisoned in a dingy sleeper train, we were relieved to finally arrive at our rescue placement – ‘Help In Suffering’ in Jaipur. Having gotten over the trauma of our plans falling apart, we were finally able to relax a bit.

Help In Suffering is a charity clinic that operates the government’s Animal Birth Control (ABC) programme, alongside a number of other projects, including a street animal rescue service, camel and equine projects. Although we were primarily involved in the ABC clinic, we were able to gain some experience in other areas too.

Interestingly, the spaying technique used in bitches is a right flank approach, using a much smaller incision and exteriorisation of the uterus using a spay hook. Advantages of this method over the midline approach include shorter surgery, less risk of wound breakdown and faster recovery (meaning swift re-release for strays).

Before long, my friend and I were operating and, slowly but surely, developing our surgical skills. Despite the neutering method being different from the most commonly used one in the UK, we were definitely able to develop useful techniques such as recognising structures, tying ligatures and intradermal suturing.

Being a charity and considering the vast number of strays in Jaipur, speed was everything, which can be a bit disconcerting when you want to triple check your ligature and all you can hear is: ‘Quick, quick, quick, next one’. Surgery mornings ran conveyor-belt style, with the next dog anaesthetised ready to go on the table as soon as the last suture knot was tied on the one before. While very different to surgery at home, it provided exposure to a lot of surgical experience, with each of us doing between two and five operations per day.

Our mornings were spent operating in the ABC clinic, and our afternoons were spent making routine checks, providing treatments to the in-patients, or handling other cases that came in, such as a very laminitic...
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horse, tumour removals and a num-
ber of aural haematomas. Having
seen two surgeries on dogs with
aural haematomas, we were able to
operate on the third one ourselves.

One morning, we rose early to
join the dog catching team at dawn
– this was an entertaining morning
spent watching one guy distract
street dogs while another sneaks
up on them and throws a canvas
bag over them, and quickly draw-
ing it shut before lifting them into
the back of the truck. The dogs are
cought early, neutered the same day
and then kennelled at the clinic for
a minimum of three days before
being released again in the area
where they were caught. Each dog
is assessed individually as to whether
they need to be kept in longer; but
three days is a good compromise
between allowing enough healing
time and not keeping the dogs from
their niche on the streets too long.

We also spent a day with the
camel vet, which involved touring
Jaipur and stopping at various loca-
tions to operate a drop-in service,
where camel owners could get free
treatment for their animals’ ailments,
as well as routine worming treat-
ment, reflectors for the camel carts
and nose picks.

After a rocky start, we had a
great experience. We are extremely
grateful to Help In Suffering for
coming to our rescue, and would
recommend the placement to any-
one looking for a lot of hands-on
surgical experience, with the added
benefits of good food and delicious
chai.

Travelling in India may be com-
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Should we have done more for Romania’s street dogs?

By Thom Ridgers (3rd year, London, Veterinary Biosciences)

Many people feel a sense of guilt that we have contributed to the decline of iconic species such as the giant panda and the Siberian tiger, but there are other causes that deserve just as much attention, like the one I visited in Romania.

There are thousands of street dogs in Romania’s capital city, Bucharest. These are not wild dogs, they did not evolve to live on the street or eat out of bins. They are a man-made nightmare for the residents and dog bites are common. In September 2013 a six-year-old child was killed by street dogs and in 2011 a woman died after being bitten, five years after a middle-aged Japanese citizen met the same fate.

On one train journey across Bucharest I saw the rotting remains of three dead dogs and a cat, several scattered dog bones and over 50 stray dogs roaming the tracks, shivering and hungry.

I remember looking into the eyes of one lonely dog sitting on the side of the road, collecting snow. I could see that he had given up hope. He was just another dog; one of the thousands. It was sad to connect with a dying animal knowing there was nothing I could do to help. I can handle seeing skeletal, emaciated victims, blood-encrusted injuries and hearing the yelps and whimpers of caged dogs, but something struck a nerve when I saw him. How could everyone just drive by and ignore him? Luckily, not everyone just drives by. That’s where ROLDA comes in.

ROLDA, the Romanian League in Defense of Animals, takes stray dogs off the streets, neuters them and rehomes them across parts of Europe (including the UK). I visited the charity in January 2013 to see the good work it does and it was an amazing eye-opening experience.

The charity is based in Galati in the east of Romania near the border with Moldova. It is run by Dana Costin and her boyfriend who oversee the operation, which currently houses around 600 dogs. With a staff of nine people working for them, it is obvious how many dogs’ lives are changed by each person. It is astonishing how they manage to help so many animals with so few resources.

The charity works in cooperation with ArcelorMittal, a huge steelworks in the city. The charity can only function thanks to the company’s contribution. It pays a weekly allowance to the charity for every dog removed from its premises. The ROLDA team captures dogs from inside the steel works and kennels them in groups of five. This avoids dominance-related fighting that would occur if the new dogs were mixed with dogs already there. The charity provides the dogs with food, water, shelter and a bed. It seems to me that some criminals are treated better than some animals; however, it is better than the alternative and the charity does the most it can with limited funds.

You may wonder why the situation got so bad. The root of the problem lies in the country’s cultural attitude towards dogs. Many homes have a dog and in many yards there is a barking dog, usually chained, which is fed food scraps. Dogs are not seen so much as companions, but more as a burglar deterrent. Money is a problem for many people, some earning less than £300 a month. When people struggle to make a living, animals can suffer as a result. Few people neuter their animals and if dogs are abandoned, they inevitably breed.

The Romanian street dogs made headlines in June 2015 as details of the government’s dog cull were unveiled, revealing that thousands of dogs had been killed. This was the news I feared, as the authorities in Romania had been forced to act. Without the funds and facilities to neuter and rehome the thousands of dogs, a quick, cheap ‘fix’ to their problem was found; and in September 2013, the ‘Stray Dogs Euthanasia Law’ was passed.

I didn’t see a single advert on TV asking for help to save the street dogs of Romania, though, is that
because it’s a largely forgotten problem. You may believe that the street dogs are Romania’s problem and that it’s up to them to take control of it, but is the plight of the giant panda just China’s problem? Is the decline of the Amur leopard a problem that should be left to Russia to deal with? When internationally recognisable ‘star attraction’ animals are in trouble, people from around the world offer to help, in stark contrast to the everyday suffering of ‘ordinary’ animals. Dogs may not nearing extinction, but surely the scale of the problem in, for example, eastern Europe merits more of a response.

I’m not against helping iconic species avoid extinction, but maybe the resources could be better distributed to help the majority. It may be too late for some critically endangered animals, in which case all the money in the world won’t save them. Why, then, don’t we focus our efforts on animals with more guarantee of success, such as helping the street dogs?

The plight of the dogs has not been caused because they are evolutionarily flawed (like some other species). Dogs are hardy souls that can withstand freezing conditions, adapt their omnivorous diet and breed readily. Just because the dogs can survive on the streets doesn’t mean they are not suffering.

The problem in Bucharest and many other eastern European cities is man’s fault, so why the public chooses to donate money to ‘save’ the cute, fluffy, badly-evolved pandas and not to the hundreds of thousands of street dogs seems illogical to me. Donated money would transform the lives of so many – not only the street dogs, but the residents of the cities and the people who adopt a new loving pet.

Street dogs are still a big problem in many cities across the globe. We should learn from what happened in Romania, to act sooner and prevent another round of slaughter. By raising awareness and helping charities that help neuter and rehome stray dogs, or by adopting strays directly, we can help stop future preventable animal disasters.
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