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Contact information for all AVS officers, committee members and reps can be found at www.avsukireland.co.uk/team

## From the editor

#### Phoebe Sussman, JAVS Editor

Hello and welcome to this year's edition of JAVS! It has been such a joy to put together, and I hope you enjoy reading the articles as much as I have.

It really has been an interesting year within the veterinary profession, with the aftermath of Covid, the changes to EMS requirements and the new vet schools at the University of Central Lancashire and the University of Aberdeen. With so much change comes the opportunity to review



what we have done in the past and work towards making it better in the future. In an article by AVS President Jack Conway he mentions a strong desire to 'leave things better than we found them'. Within the climate in which we currently find ourselves, there are great opportunities to do just that. The Covid-19 pandemic, despite its many complications, has made our vet schools stronger and the desire to rebuild our communities has been immense. I really wanted to focus on the strength vet students have found during this period and so this issue has a dedicated section highlighting the ways in which vet students have found community during and after the pandemic. A particular highlight is the article by Luca Merkel about the impact of the Bristol Paws Project on the wider Bristol community.

Equally, we have had our EMS requirements reduced from 26 weeks to 20 weeks. The RCVS is reviewing the current EMS structures to ensure that all vet students are able to benefit from being on placement. As a profession we are always working to widen our diversity and be as inclusive as possible. Helena Ivey's article on undertaking clinical EMS with ADHD and autism is a reminder that we need to ensure EMS policies and structures do not disadvantage any vet student. AVS President Jack Conway and Junior Vice President Charlotte Jones have spearheaded this conversation and I hope that JAVS can provide a voice for vet students within this debate.

With so much turbulence over the past few years, alongside the pressure of vet school, wellbeing is crucially important. I hope that you are all finding some time for yourselves and are able to decompress outside of life as a vet student. I really enjoyed Katie Burnett's article discussing ways to make the most of this time, and I am following her recommendation of trying out a new local café, enjoying a coffee and sweet treat as I write this. Sometimes, it is easy to get wrapped up in the big things, and not fully appreciate the small joyful moments we have throughout the day. I hope that this edition of *JAVS* might bring a bit of light to your day and that it highlights just how many great opportunities there are for us vet students.

I would like to thank all of the contributors to this edition, it really has been great to hear about everything you got up to. I would also like to thank last year's editor, Elizabeth Stephenson, for her guidance on editing JAVS as well as the whole of the AVS committee for their support. If you fancy writing an article for JAVS, please send me an email (javseditor@gmail.com). I am always happy to provide some guidance and discuss ideas. There really wouldn't be a JAVS without passionate vet students who are willing to contribute!

Phoebe

## London Vet Show: a great chance for students to network

**Charlotte Jones (AVS Junior Vice President)** 

LONDON Vet Show (LVS) this year boasted 345 exhibitors and more than 200 truly inspiring speakers. I was keen to make the most of my time at the show.

I began on the Thursday with 'Call of the wild: principles of first aid for injured wildlife in practice'. As someone interested in wildlife and exotics, I find that I'm always left wanting more beyond our lectures at university, so any extra teaching is welcome. Joanna Hedley, head of the RVC's Exotics Service, did a fantastic job of kicking off LVS for me, covering the challenges of working in wildlife medicine, triaging cases and first aid for common injuries.

Following this, current AVS President Jack Conway and I made the most of the exhibition, taking part in all the games, challenges and photo opportunities we could. Our highlights included:

• MSD's absolutely huge pick-nmix in the middle of the hall;

• Slushies, magic tricks and chocolate fountains;

• Getting professional headshots taken at Vets Stay Go Diversify;

• Pens and tote bags galore (think freshers' fair on steroids);

• A very fancy VetPartners water bottle with a warming sleeve;

• Some cat sprinkles (perfect for my six-month-old kittens);

• The fluffy green dog ears given out by Elanco at its afternoon wine and beer bar, which caused a sea of green around its stand;

• The prosecco, parasite-themed cocktails and various other drinks that served us well as pre-drinks before the BVA Gala Dinner later that night!

As much fun as this was, while doing the rounds we also had the opportunity to speak to a wide range of exhibitors (future employers...) and chat about the future. Hearing first-hand about all the



Charlotte and AVS President Jack Conway at the BVA's Gala Dinner during London Vet Show

graduate schemes on offer and getting the contact details of those running the schemes was a great way to start me thinking about my next steps. In 18 months, I'll be let loose into the world as a vet...

Of course opportunities for us are not solely limited to graduate schemes, or even to clinical practice. If you're getting to the end of your degree and aren't sure clinical practice is for you, there's lots of opportunity out there in all sorts of different areas.

On the Thursday evening, Jack and I attended the BVA Gala Dinner. After a prosecco reception, we took our seats and enjoyed a threecourse meal, before watching on as Henry Lamb was named as the BVA Young Vet of the Year 2023. We got to meet Henry afterwards and find out more about his work in the poultry sector. It certainly is empowering to hear how much young vets can bring to the profession, not just from Henry, but from all three finalists.

On Friday, I went to see lack speak as part of a panel discussion on making the most of EMS, a particularly relevant topic as the RCVS brings in new guidelines. Jack was joined by Professor Liz Mossop from the BVA's EMS Working Group, Emily Collins-Wingate, who is a recent grad representative on BVA Council, and Dr Rhian Littlehales, head of early careers at Medivet. Discussions covered various aspects of EMS, ranging from what to wear on placement, to what makes a good EMS student but also, more interestingly, what makes a good placement for us.

The overall consensus was that communication between the practice and the student is imperative and not only to find out what you want to achieve. Something as simple as introducing a student to the team properly can help them to feel included and valued. I wholeheartedly agree with this; I'm sure many of us can remember that awkward feeling in a new practice where you don't know what to do or who to ask – only to go and repeat the same process in another practice the following week.

LVS is a fantastic opportunity for students to network, and it's not too expensive to attend. If the cost-ofliving crisis is hitting hard, there are plenty of stewarding opportunities available with different companies. What a fantastic way to take control of your future – and get enough free pens to account for all the ones you'll lose on EMS!

## Unholy fun at Sports Weekend!

Conn Kavanagh Morris (Harper and Keele senior rep)



Holy order: the Harper Keele 'nuns' before setting off for Sports Weekend

FOR anyone who attended AVS Sports Weekend hosted by the University of Surrey back in October, I hope this article might help to jog your memory; for anyone who failed to attend, I apologise for any FOMO you may end up feeling after reading this piece. What follows is an AVS Sports Weekend 2023 overview from the perspective of a Harper Keele vet student...

#### Friday

Our vet school is designed across two separate campuses, one at

Keele and the other at Harper Adams. To accommodate everyone, a bus first collected students from Keele then united us all at the Harper Adams campus. Once our whole entourage was together in the Harper vet school building, the 'surprise' nun costumes were handed out to all while gospel music rang out around the building (Hallelujah being a personal favourite). When everyone had donned their habits, we made sure to get photographic evidence of the group at the most holy point of the weekend!

We then set off for Guildford, making the odd toilet break on the four-hour journey south. We arrived at the University of Surrey's main SU nightclub (Rubix) where we were met by an array of vet students in various costumes and also other Surrey students, giving a funky mix of fancy dress and smart casual.

This opening night turned into a great mixer, giving us a chance to meet fellow vet students from all over the UK and Ireland. Anyone partaking in the AVS challenge got to know quite a few students particularly well!



Actual sport did take place!



Post-match celebrations

When the night ended we all disbursed across Guildford to stay with Surrey vet students who had kindly offered up their spare beds, couches and floors to accommodate the visiting AVS attendees.

#### Saturday

As one might imagine, everyone woke up bright-eyed and bushytailed (not!) on Saturday morning, ready for the sports part of Sports Weekend. The rain delayed our plans slightly, pushing the start of the sports back until midday, much to the delight of most students trying to recover from the night before.

Luckily, by noon, the rain had eased, everyone seemed to have recovered adequately, and everything was able to kick off. Harper Keele managed to compete on all three fronts, putting teams out for women's netball, mixed football and men's rugby, achieving a mix of successful and unsuccessful results.

After the intense and demanding level of sporting action, food was needed, and there was a choice of different vans providing delicious free food, which went down a treat with all attendees. This was closely followed by rehydration by the bar.

Later on, the main sporting event of the day took place, with Harper Keele taking on Liverpool in a muchanticipated Boat Race! In round I, Liverpool narrowly got the better of Harper Keele, but round 2 saw a nail-biting finish with Harper Keele edging it. The decisive round, however, was unfortunately forgotten about with so much going on and will have to be revisited.

Inside the marquee there was a constant party with both a DJ and a

band keeping the place rocking and the dance floor full.

Later in the evening, the semi-final of the rugby world cup was taking place, with England playing South Africa, and many of us headed into Guildford to catch the game. Vet students – many still in fancy dress – seemed to take over Spoons for the duration.

Afterwards, the English fans needed to drown their sorrows, so we all lightened the mood and headed to Casino, a Guildford nightclub. Here we partied the night away in the multiple floors; from techno to R&B to the sing-along classics, there was a room for everyone. After dancing into the early hours of the morning everyone made a beeline back to their accommodation with some costumes still intact and others less so.

#### Sunday

Sunday was very much about gathering the troops and getting home in one piece. Coming up to departure time at noon, there were Harper Keele students appearing from everywhere, the diehards still in their habits. Some of the weekend's organisers kindly met us at the bus stop to wish us well and ensure that no nuns were left behind.

I can say without a doubt that Sports Weekend 2023 was a huge success, and I have 66 nuns to back up this statement! I encourage anyone who reads this article to attend a Sports Weekend. You will not regret it! You'll meet students from all over the UK and Ireland, compare experiences, have a great laugh and, most of all, make friends for life.



Meeting new people, making new friends

# Support for new vet school's vision to widen participation

MEDIVET, a leading European veterinary care provider, has entered a multiyear sponsorship with the University of Central Lancashire's (UCLan's) new School of Veterinary Medicine, in support of its vision to widen participation and expand the inclusion of under-represented groups in veterinary education.

The September 2023 cohort of 78 vet students will be the first to be able to access a range of financial and training support from Medivet as part of its sponsorship.

'The university has a keen focus on improving access to, and inclusion of, under-represented communities in higher education, and the new School of Veterinary Medicine holds this ethos very much at its core,' said Peter Holland, associate dean for partnerships and enterprise in UCLan's School of Veterinary Medicine. 'We took a different approach to selecting students for our BVMS course as we wanted to widen participation in veterinary education by addressing some of the demographic or circumstantial barriers that have denied people the chances of learning and becoming the next generation of vets.'

He added: 'As a 'widening participation'' sponsor, Medivet is investing significantly in UCLan's students to enable the school to realise many of its ambitions to broaden the entry pool into veterinary higher education, and is actively supporting their development across the five years for a successful future in the profession.'

Chris Cools, CEO of Medivet, commented: 'Our profession needs great clinical talent for a long-term, healthy and sustainable future, and we are proud to support UCLan in its ambition to attract, teach and train a new generation of veterinary students from all backgrounds.

'The school's focus on academic and practical teaching and training



Some of the first cohort of students at the new University of Central Lancashire vet school with members of school staff and representatives of Medivet

will give the students a strong foundation to enter our profession, and we look forward to working closely together in these coming years to help all UCLan's veterinary graduates prepare for a fulfilling and rewarding future in veterinary medicine.' The school aims to create a diverse body of students and ensure that, irrespective of circumstances, they are supported to achieve a successful future in veterinary medicine and allied animal health professions.

## **Piquing an interest in research**

Harri Hayes (University of Bristol)

On 27 and 28 November, the University of Bristol hosted the annual INSPIRE Veterinary Research Conference, inviting vet students from across the country to present their research projects. Spending the weekend at the conference was definitely an eye opener for me. Coming in as a newbie to the idea of research, you could say I really was inspired! Reading my fellow students' research posters on a variety of current and future issues within veterinary medicine was very interesting and it was great to learn about different areas of veterinary research.

There were also many guest speakers over the course of the weekend, with talks on topics such as 'Doing research alongside being a vet', 'How to get started in research as an undergraduate' and 'Veterinary career pathways in One Health research'. These provided a real insight into the world of research and what opportunities lie ahead for young keen veterinarians like us. Additionally, it was a good opportunity to ask any questions we had about working as a vet in research. It was also great to see my friends presenting the research projects that they had completed over the summer, listening to such interesting and thought-provoking ideas.

Seeing like-minded students work on projects they are passionate about was impressive and exciting. It goes to show that there are amazing opportunities which come with undertaking research.

On a final note, I would like to thank Linda Wooldridge and Alex Tasker for such an amazing weekend full of interesting talks, delicious food and drinks!

# **BVZS conference:** a highlight of my student experience

Lewis Bruten (University of Bristol)

WALKING through Birmingham city centre on a freezing morning in November, I'll admit I wasn't too sure what I was letting myself in for. The British Veterinary Zoological Society (BVZS) conference had been recommended to me by a few of the exotics vets I'd done EMS with, but I wasn't sure how applicable it would be to students. However, looking back now, I can honestly say it was a major highlight of my veterinary student experience. Although I was in the company of another Bristol student who'd been the year before, if you're contemplating going solo, I would still highly recommend it!

Hosted at the conference centre on Aston University campus in the centre of Birmingham, the conference ran from Friday through Sunday and was split into two streams each day. Friday's proceedings opened with a welcome from BVZS president Stuart Patterson before diving into the lectures for the streams of the day - zoo health and nursing. I spent the day jumping between the streams. All manner of topics were covered, from the practicalities of white rhinoceros dentistry by lo Dodds, to the sustainability of ultrasound gel by Romain Pizzi, successful anaesthesia in avian patients by Adam Gregory and a rather sobering presentation by Neil Forbes on infection control and assessing practice hygiene through ATP testing - something that most practices he'd tested had failed.

The day was broken up with lunch and coffee breaks when attendees could grab some of the delicious food the conference centre staff had prepared and check out the stalls from the companies that had sponsored the meeting. CAB Journals had some great deals on veterinary textbooks, the International Zoo Veterinary Group was promoting its specialist exotics pathology service and BattLab



had a number of helpful handouts on its range of diagnostic tests.

Friday was capped off with drinks in the lobby, and it was a great way to network with people in the field. I managed to meet some new people, see some contacts from EMS placements and also realised that there were far more students there than I'd anticipated. Most of the attendees were more than happy to introduce students to vets who shared their interests, or were in similar parts of the country. It was clear that the conference was eager to promote student and nurse involvement, which was definitely appreciated.

## Wildlife rehabilitation

The Saturday kicked off with a muchneeded coffee and a welcome before the streams - focused on wildlife health and zoo health - began. As someone who is passionate about wildlife health, I spent most of my day on this stream, which included a great roundtable from Liam Reid, Naomi Johns and Josie Nott on 'Decision making in wildlife rehabilitation'. This triggered discussions on the impact of wildlife rehabilitation, both positive and negative, when euthanasia is the best option and what makes a wild animal a good candidate for treatment. The discussions were well informed by a

previous lecture by Liam Reid where he outlined the effectiveness of a 'less-is-more' approach to dealing with trauma patients in wildlife rehabilitation settings.

Saturday also hosted the BVZS AGM, where the main topic of discussion was the affordability of membership and the conference, and how to encourage more nurses and students to join, which is great news for us and any exotics-orientated nurses! In the evening, everyone got dressed up for a three-course meal, followed by an exotics/zoo-themed pub quiz headed up by Mark Naguib and a silent disco into the early hours of the next morning.

## Student/new grad focus

Sunday was a slightly more subdued day, but still with some great content as the streams had a student/new grad and exotics health focus. The student/ new grad stream opened with a presentation by the Zebra Foundation on its funding for research projects followed by a whole host of lectures on key techniques for a newly graduated vet wanting to wade into the world of exotic medicine. My highlight was a roundtable on 'contextualised care' by Sarah Brown where she tackled the impact of client factors, such as cost, on exotics medicine, and how viewing treatment in the context of these, rather than the gold standard, can help reach the most satisfying conclusions for all parties involved.

The day was capped off with a goodbye talk and another pub quiz, before we headed home, I loved attending the conference and would highly recommend it to any student with even the slightest interest in exotic/zoo/wildlife medicine. It is a great opportunity to network and learn within a field that really is a frontier of veterinary medicine. Maybe I'll see you next time!

# Join a VetPartners graduate programme







# Did you know that VetPartners offer small animal, farm, equine and mixed graduate schemes?

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- Blended learning encourages you to put the theory you've learnt to good use!
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Visit our graduate page by scanning the QR code to learn more, or email careers@vetpartners.co.uk for an informal chat.



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## I never wanted to be a vet!

Jack Conway (AVS President)

I NEVER wanted to be a vet. I don't have the typical story of 'I've always wanted to be a vet ever since I was a child'. I wanted to be a helicopter pilot. I wanted to be a professional video game player. I grew up playing games after school – your classic nerd stereotype. I was unsure what I wanted to do even through GCSEs and A levels.

I was also never very good at science, but I was always pushed to do it as it was the 'way forward to university'. I decided to study biology, chemistry and economics for my A levels and inevitably I was bad at them. By the end of my AS levels, I had two Us and a E.I was then told to fill out my UCAS application and decide on my future. I was I7 and I was being told I had to plan out my life. I decided to try to become a vet. Why? I wanted to work with penguins.

## The journey to vet school

I began researching 'how do I get into vet school?' I found foundation years and gateway programmes. I applied for two: one at a vet school that shall remain nameless, which rejected my application because I didn't have a B grade in English language GCSE, and one at the RVC. I put all my cards into the RVC Gateway programme and filled up the rest of my application form with other animal- and biology-related courses at other universities.

I had no work experience; I'd never even seen a cow in real life! I quickly found some work experience at a local practice with a vet (who surprisingly remembered me seven years later when we ran into each other at London Vet Show) and I got an interview for the RVC. The interview turned into an offer and the offer turned into six years of vet school, of which I now have one year left.

I've had some ups and downs during vet school. I failed a year. I



suffered from mental health problems. I got a job working for my Students' Union. I then discovered AVS. AVS was all the hype – the stories, the excitement from older years. 'You have to go to at least one AVS Sports Weekend' I was told. Therefore, I did...

## **Becoming AVS President**

AVS Sports Weekend, Glasgow, 2019. The last major event before the global pandemic. A weekend full of 'sports'. I didn't know what to expect. I'd never been to Scotland before; I'd never even been past London! This was the furthest north I'd ever been. After piling onto a coach in a cone costume with fellow RVC students, with a sevenhour journey ahead of us, we finally reached Glasgow. The weekend proceeded how any AVS Sports Weekend proceeds. Flash forward and I'm sitting in a Wetherspoons with the AVS Committee drinking lägerbombs. That was the start of my involvement with AVS.

Along with the nerd stereotype, I was never very outgoing. I was never very good at talking to people. I have a massive fear of public speaking. So how did I become the President of AVS? I just decided to go for it. While vet schools contain masses of extremely smart people, not many of them are very 'techy'. At the time I applied for the Communications Officer role within AVS. I was working as a social media manager for my Students' Union. Because I apparently enjoy loading myself with things to do, I decided to go for the Communications Officer role in 2020. This role became more important during Covid, when everything moved online. I became very quickly and very deeply involved with AVS from the get-go. I held the Communications Officer role for a year before I decided to stand for Junior Vice President. I lost that election but as I had another year as Communications Officer, I decided to run the following year and I was elected to Junior Vice President in 2022.

## Now and the future

On becoming JVP I was immediately thrown into meetings and discussions with the highest and most important people within the veterinary industry. Meetings with the BVA, the RCVS, Veterinary Schools Council; dinners; conferences; congresses – the list goes on. I went from someone who didn't even want to be a vet to representing all vet students in the country.

The reason I decided to take on this role was to make the vet school experience better than I had found it. Now don't get me wrong, I've had a great run at vet school – but I strongly believe that we should leave things better than we found them. For the downsides I had endured and the upsides to vet school I had experienced, I wanted to make the negative better and the positives even better. The only way to do that is to make your voice heard.

The veterinary industry is small – everyone knows everyone. The biggest coincidence I experienced was that I used to play video games with the daughter of the then BVA Junior Vice President. People know

## FROM THE AVS PRESIDENT

me (which is a strange feeling) and networking is one of the best ways to make your voice heard and to make your future. My favourite parts of my involvement with AVS have been networking and the opportunities people have given me as part of this role and I hope that I can make a difference to students' lives as they go through vet school and the future.

I've had a small crisis during these few years and with starting EMS. Do I want to be a practising vet? When I joined vet school the answer to this guestion was a definite yes. This then went to no. Maybe I go into nonclinical work? I'm great at policy, I'm great at speaking to people. Do I go into teaching or government work? This route isn't taken that often straight out of vet school and there's not much information on this (side note: I know there is a vet shortage, but non-clinical routes should be promoted more - hint, hint RCVS and vet schools). After a wonderful set of placements at Claremont Veterinary Group in Bexhill and Medivet Potters Bar my thoughts on this have changed again.

Looking to the future maybe I do become a practising vet or maybe I do go into non-clinical work. I feel

## **Fulfilling a dream**

One of my dreams on becoming AVS president was to speak at the London Vet Show. After attending two years previously and seeing my senior, Charlotte, speak on the topic of EMS and before that Calum, the president preceding Charlotte, be the keynote speaker for the BVA, I had a tradition to uphold.

And then the email arrived – 'We would be delighted if you would be able to join a panel to discuss EMS.' I absolutely couldn't turn down this opportunity.

Months of planning and the day was finally here. To be honest, I'm not a huge fan of public speaking. I hated presenting in school and I hate the sound of my own voice. Presenting doesn't come naturally to me. Sitting in the bright lights strapped with a Brittney-style microphone, the session started. All these other professional and big names within the veterinary industry and then just me. Was I breathing too loud, was everyone staring at me, was my hair OK, am I talking nonsense?

At the end of the day that may have happened or it may have not, but what I do know is that I know EMS. I know what is needed and why my opinion matters. I was honoured to be able to sit on a panel at one of the biggest vet shows in the world – my name on the speakers' list, joining the ranks of my lecturers, veterinary giants, presidents and CEOs.

We need change within the EMS system. It is fundamentally broken. High costs, harassment, an unbalanced learning field. What are we asking for? Change.

that no matter what I decide, the experience I have gained by being a part of AVS has given me options. It's given me people and friends that I can contact for information and advice and further opportunities. I will always remember the people I've met through AVS, which can only be a benefit for the future.

What does my future look like?

Maybe I work with penguins, maybe I become chief vet, maybe I become a lecturer or maybe I become a small animal vet. Whatever the case, getting involved and just doing it is what's brought me here.

• A version of this article was previously published in *Vet Record* (6/13 May 2023, vol 192, p i).

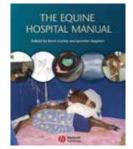
## **BOOK REVIEW**

## **Comprehensive overview of equine hospital medicine**

## The Equine Hospital Manual

Edited by Kevin Corley and Jennifer Stephens 736 pages; Blackwell Publishing, 2010. ISBN: 978-1-4051-3016-5

Reviewed by Phoebe Sussman (University of Bristol)



This manual provides a thorough overview of equine hospital medicine. The first chapter discusses common surgical procedures carried out in adult horses, before addressing procedures in the neonatal foal. The textbook then goes on to discuss hospital design and organisation before turning its attention to anaesthesia, nutritional management of the hospitalised horse, common treatments and common problems encountered in hospitalised horses. The remainder of the book progresses logically through monitoring and treating the coagulation system, the cardiovascular system, the respiratory system, the gastrointestinal system, the liver, the urogenital system, neurological system, eyes, skin and musculoskeletal system. Its final chapter describes indications for physiotherapy and treatment techniques.

If covering all of those topics is not enough to convince you that this book provides a thorough and invaluable guide to equine hospital medicine, it is also worth mentioning that each chapter is written by experts within that area of equine medicine with their contributions edited together by Kevin Corley and Jennifer Stephens.

Throughout the textbook, there are great photographs and diagrams which really help to visualise the different procedures and significant anatomical landmarks. I would highly recommend this textbook to anybody interested in equine hospital medicine or carrying out a placement within an equine hospital.

# Bringing vet students and the wider community together, one vaccine at a time

Luca Merkel (University of Bristol)

THE Covid-19 pandemic didn't spare anyone from its devastating impacts, and it continues to cast a long shadow. Without allowing anyone to catch their breath, we have spiralled into a cost-of-living crisis in the UK, which is affecting the daily lives of many.

Within the veterinary community, this is particularly palpable. The fact that the companionship of an animal comes with a price tag of veterinary care is often a barrier for many and prevents many animals receiving basic veterinary attention, such as preventive medicine.

For this reason, the work of the Bristol Animal Rescue Centre (BARC) is so important. BARC runs weekly outreach clinics in lowerincome pockets of Bristol to provide free health and welfare checks, consultations and medication such as flea and worming treatment. The cost-ofliving crisis has caused mounting difficulties for many and the added pressure of caring for their pets is often extremely distressing for owners who are facing financial strains.

I have been fortunate enough to have gained an insight into the important work that BARC does through joining the Bristol Paws Project (BPP), a society run by veterinary medicine and nursing students that helps charitable causes throughout Bristol. One of the major events that BPP supports is the BARC vaccine drive. This is an annual event, run by the joint efforts of BPP and BARC. We students fundraise to cover the cost of venue hire and the vaccines. Dog and cat owners are able to make an appointment in advance for their pet to be vaccinated. This also gives them the opportunity to see a vet, have their pet checked over and have any



Teaming up to make a difference - the volunteers at the vaccine drive

queries answered. It makes something that may seem inaccessible to many, more accessible.

The vaccine drive day is fast paced and efficient. My involvement included organising the volunteer vets and the necessary insurance. During the day I was able to assist in client communication, clinical exams and administration of vaccines. It was an extremely insightful day. It gave me the chance to chat with experienced clinicians about their work within



Events like the BARC/BPP vaccine drive look out for the welfare of animals in the community

charity medicine and I also gained an understanding of the challenges faced by owners who struggle to pay for basic veterinary attention for their dog or cat. A pet can be a lifeline for many people and veterinary services shouldn't discriminate between those who can afford care and those who cannot.

Within the current climate, the cost of veterinary care is only increasing. This simply serves to highlight the importance of charity medicine and events like the BARC/ BPP vaccine drive, which are not just about looking out for the welfare of animals in the community, but also about keeping families together. As future vets, we have the unique opportunity to greatly impact our communities through our work, not only making the lives of animals better but their owners' lives, too.

You can read more about the work that BARC does at www. bristolarc.org.uk and can gain more insight into how students can get involved in community and charity veterinary medicine by checking out BPP on Instagram: www.instagram. com/bristolpawsproject/?hl=en

# Experts in fluid therapy – reviving a student bar

Patrick Kearns (University of Bristol graduate)

AT Bristol Veterinary School there is a general rhythm to life for the BVSc students. The first three years are spent living in Bristol, focusing on academic work, but enjoying all the social life and delights that Bristol has to offer. When those three years are up, students get to really sink their teeth into the clinical and practical side of the veterinary degree. However, this move to clinical teaching does come at the cost of being shipped out to deepest darkest North Somerset to study at the Langford campus.

With this ominous change ahead of us, myself and fellow vet student David Butcher heard of the opportunity to stand in an election to run the bar on Langford campus. Beating the competition by a fine margin, we arrived with Langford's head of operations Stuart Pope (a previous bar manager himself) to be given the keys to this fine establishment of which we had heard great tales from Bristol graduates on EMS.

The pandemic had not done the place much kindness. Having been left locked up after a pub night, it was certainly a fine experiment in cultivating some interesting microbes. Beer lines had been taken away, there was no stock, and no soft drinks gun; it was an empty shell of a life compared to the vibrant stories we had heard.

David and I, excited to run a pub, had a simple plan to revive it:

• Have local beer and cider on tap – Butcombe and Thatchers were fantastic suppliers, but we also couldn't resist the allure of Guinness; OK, so Dublin may not be local, but the black stuff does go down well with good friends and a Six Nations game.

• Offer lots of spirits – vet students tend to enjoy testing how drunk they can get as efficiently as possible.



• Have cheap drinks – easy, don't pay yourselves for working, except maybe with a beer or four.

• License the premises – the VDS might struggle to defend illegally selling booze.

• Build a good community – actually, this was already in place, vet students, especially Bristol ones, have a habit of being good craic (UCD taught me this word on an AVS weekend).

• Ensure an inclusive environment and provide non-alcoholic beverages – all are entitled to have a social space away from the pressures of study.

• Come up with a name for our establishment – after some deliberation, we named our pub 'The Centaur Arms'.

We opened on Halloween 2021. With immediate complaints from Langford security about inebriated students and noise, it seemed we were back on track to fulfil our predecessors' legacy. The pumpkin carving competition ended with a fair few smashed up all the walls but all-in-all, a cracking start. We were soon joined by Charlie Saker, a master of cocktails and construction, who added flair to the bar and to the drinks, and by Jacob Antino, a social media wizard as well as a great vet student with an untameable interest in ferret medicine.

As we neared our final-year rotations, the anticipation and fear of putting on scrubs and trying not to make idiots of ourselves in front of world-class clinicians grew. We did still make fools of ourselves, however; one final-year bartender who will remain nameless was under the impression that all cats gave birth in September!

What made life easier was a routine that set in, whereby the clinicians of the Langford hospital and the students alike would finish their Friday's work and all meet for a drink in the bar. A special mention has to go to 'team anaesthesia' at Langford Vets, which, despite being the hardest rotation with the most pressure, always enjoyed a catchup with the students they had put through the furnace that week and made the fast-approaching reality of being a qualified vet seem somewhat doable.

We also especially enjoyed hosting students from other universities for sports tours or educational congresses. These events were always fantastic and a great way to forge connections with other vet schools.

After two years and countless hours devoted to the bar, a phrase was coined which summed up all the thoughts of those who put time into it – 'Long Live The Centaur Arms!' Any vet student who visits the Langford campus would be remiss not to pay a visit to our pub. Rumour has it that no other vet student bar can hold a candle to the fortress that is The Centaur Arms...

# How a vets' hockey team changed my perspective of a sport I love

Caitlin Cressey (University of Bristol)

SEPTEMBER 2020. Lockdown in a new city. The common experience at university halls of not quite finding 'my people' was exacerbated by the fact I was not supposed to leave my flat in those first couple of weeks. A slight feeling of panic was lingering as I wondered if I'd made a horrible mistake. Then I found the Bristol vets' hockey team and things began to change...

Although I had played hockey at school, a year off before vet school had given me time to pause and think about the experience. The attitude of both the team and the coach I had played with made me initially cautious about joining a university team. Instead, with the vets' team, I found myself in a friendly mixed group, who were encouraging and happy to have me. There was no ability assessment or overwhelming pressure to do well; I just showed up and was instantly part



Larking about

of the team. I think that, even in the very first training session, I knew this team was going to shape my five years at university.



Our fabulous kit and all our training sessions are made possible by our sponsors IVC Evidensia Farm Vets. I'm so grateful to them for allowing me to continue these sessions which mean so much to me

### Learning from playing

I have now played for four very different hockey teams, and each has taught me something about sporting behaviour and how I cope with everyday stress. School-level hockey and the University of Bristol Ladies Hockey Club have a driven focus on winning, which has helped test the limits of both my skills and my mental capacity to deal with pressure. My local ladies club back home in Newcastle (Tynedale Hockey) has a stronger focus on individual player skill and working on a more defensive strategy. The vets' team - Centaur which plays in the University of Bristol intramural hockey league, is seven-a-side and encompasses a huge range of abilities. It has taught me benevolence and, importantly, that you're only as strong as your weakest player.

### **Changing perspective**

I haven't always had a positive relationship with hockey; school brought out a mean competitiveness in me that I didn't like. The pressure of getting into (and staying in) the top team was intense. It took being demoted to the team below at school to realign my priorities regarding winning vs enjoying myself. Don't get me wrong – I certainly want to win; I just don't want the price of it to be my enjoyment of the sport.

While I believe that sport in general is a fantastic way to shake off the sluggishness of sitting at a desk staring at a computer, I think it brings its own pressures if you're playing in a more competitive league. While at home, I gained a lot more gratification playing for my local women's team than the school team. Enthusiasm was high and we looked after each other. It is so important to have an outlet for any stress you feel and the support of others, even if it's just on a sports pitch.

## **Reigniting a passion**

Playing for the vets' hockey team at university reignited my passion for team sports. It's such a friendly environment, I can't help but love it. We train once every two weeks and have weekly matches in the intramural league against other teams within the university. My first year at university in 2020 was not the easiest; no faceto-face lectures, meeting a tiny proportion of my cohort from behind mask and visor, and my own medical issues all made for a pretty anxious time. The exhilaration and relief I felt at those early training sessions and friendly matches was unparalleled. Even in bitter cold and lashing rain, I always left feeling better than when I'd started - running on a hockey pitch for an hour was a release.

Four years on and I'm now running the sessions myself, hoping I can inspire new vets (and non-vets) to try a sport that has brought me so much joy. Many of our games are played with great determination (but not necessarily the skills of more serious teams) and there is so much encouragement on and off the pitch to get involved no matter your ability level – you can't help but feel buoyed up by it all. I cannot recommend local leagues and friendly mixed teams enough; even when we're not playing our best (or are horribly hungover from the night before!), there is always a healthy dose of team spirit and support for each other.

For me, becoming captain after playing for the vets for three years is a way to give back to the team that made my first years at university so much fun. If I hadn't played for them, I would not have had the confidence to try for the university team, or the resilience to know that as long as I'm playing my best game, it doesn't matter if we win or lose.

I'm really focused on welcoming everyone of all (or no) abilities to come and give it a go. You never know how important something might become to you until you try



Coaching in action!

it. I think playing for a friendly mixed team is something I will try to maintain throughout my career, and I'm finding a new joy in coaching the sessions myself. Watch this space -1 have big plans for our team!

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# Canaries in a coal mine? An autistic and ADHD perspective on clinical EMS

Helena Ivey (University of Nottingham)

MY name is Helena Ivey, and I am an intercalating MRes student at the School of Veterinary Medicine and Science at the University of Nottingham. I was diagnosed with ADHD and autism during my first year of university. Receiving this diagnosis allowed me to better understand myself and develop a passion for investigating the experiences of my fellow neurodivergent vet students.

Having completed my third-year project - a qualitative study of the experiences of neurodivergent veterinary students at the University of Nottingham – I am now undertaking an MRes investigating their experiences on clinical EMS (CEMS) and clinical rotations. I'm also investigating the experiences and opinions of clinical rotation staff regarding teaching and supporting neurodivergent vet students. Through our work, my supervisors and I are aiming to foster a more supportive clinical learning environment for neurodivergent vet students here at Nottingham and are hoping that our findings will be applicable to other vet schools and veterinary practices that take students for CEMS.

A lack of research on neurodiversity within veterinary medicine hinders our understanding of how to better support individuals within our profession who are neurodivergent. This lack of understanding and awareness of neurodiversity can increase stigma, impact disclosure of neurodivergent conditions and cause additional stress and anxiety to those who are neurodivergent. Seeing and experiencing this inspired me to work towards providing further support for neurodivergent vet students whose experiences may



mirror my own, and developing a deeper understanding of how we can change veterinary education not only to better support neurodivergent individuals but all vet students.

In this article I will draw on my own experiences of CEMS placements to offer my perspective and express some of my opinions about the current EMS model. Findings from my previous and current research also allow me to highlight some of the challenges faced by neurodivergent students. I will also discuss the forthcoming changes to the EMS model.

### My experience

Undertaking CEMS has been one of the highlights of my time at vet school; however, it has also been one of the most stressful and inconsistent periods of my life. I consider myself to be a practical person and visual learner, so being able to experience things firsthand and attempt them myself has allowed me to solidify my understanding of topics that I had struggled with during lectures. Before undertaking my CEMS placements, I had considered leaving the veterinary course as I had been struggling with burnout and anxiety about my future within the profession, but engaging in the practical aspects of veterinary medicine through CEMS helped to reignite my motivation and learn in ways that were more beneficial to me. I also believe that some of my autistic and ADHD traits, such as the ability to hyperfocus and work well under pressure, have been beneficial during my placements.

I am incredibly thankful to have mostly had positive experiences on my CEMS placements; however, there were several aspects that I found stressful and uncomfortable.

Finding placements that were suitable for me was challenging as a lack of information about the practice team in relation to knowing who would be available to teach you and ask questions to, practice layout and expected responsibilities led to a lot of anxiety. Walking into somewhere new and not knowing anyone, or what they expect of you, can be daunting, especially when you're unaware of whether being autistic or having ADHD will affect the way you interact and how you are viewed.

'Masking' to fit into a new environment out of an initial fear of judgement is always a consideration for me, but it is also exhausting. I try to mirror the other people in a practice at the beginning of a new placement so that I can gauge whether I feel comfortable in disclosing information about my neurodivergence to the relevant members of staff to better explain how my brain works or receive reasonable adjustments. I normally disclose additional information about my ADHD or autism on a situational basis, and I base it on whether I think it is necessary for me to do so to explain why I may struggle with certain things.

To me, one of the most tiring aspects of CEMS is trying to fit in and be a 'good' vet student. Overstimulation and auditory processing issues are the main things I struggle with on placements, and I have disclosed my neurodivergence to staff on multiple occasions because of mistakes occurring or stress on my part relating to them. I feel as though justifying myself might help reduce any potential judgement, as worrying that others may find me 'stupid' or 'incompetent' is a constant source of stress. I'm sure many other vet students with hidden characteristics feel uncomfortable disclosing information about themselves due to fear of stigmatisation.

## **Research findings**

Disclosing your neurodivergence on placement is a personal choice, but there are several aspects that can influence a decision to disclose. Findings from my research have highlighted a pattern of situational and contextual disclosure based on necessity among students when disclosing their neurodivergence on EMS placements. A lack of confidence surrounding disclosure was found, with some students discussing how previous experiences had impacted their confidence in disclosing their neurodivergence.

Fear of judgement by others was also shown to impact student confidence. In my most recent survey of 24 neurodivergent vet students in years 3, 4 and 5 from the University of Nottingham who had undertaken CEMS placements, 10 participants stated that they chose not to disclose their neurodivergence to relevant staff when on CEMS placements. A further I3 answered that they sometimes disclosed their neurodivergence, and only one stated that they did disclose when on CEMS placements.

Relevance and feeling comfortable around staff were shown to impact students' decisions and ability to disclose, with one participant relaying concern that they would be treated differently if they disclosed their neurodivergence and potentially be removed from the course.

## **Education and training**

I think a lack of awareness about neurodiversity in the wider veterinary profession impacts our understanding and treatment of neurodivergent students on placement. The lack of specific research relating to neurodivergent vet students exacerbates this and means there is no specific information on how to better support both neurodivergent students and the staff who work alongside them in vet schools and on placement.

There is a need for further education and training within veterinary education to decrease the potential impact of stigma arising from lack of awareness and allow neurodivergent students to better navigate both their time at university and on EMS. Increasing our understanding of neurodiversity within the profession would allow neurodivergent students to feel more confident in disclosing information on placement and ensure that staff in practices that take students for CEMS placements have a better understanding of the specific learning differences and needs of those students.

I hope that continuing to push for increasing education surrounding neurodiversity within the profession will also decrease the incidence and impact of stigma. Further education could potentially include compulsory CPD or other training courses for all vet school students and staff, and for staff in practices that take students for CEMS placements.

I believe that encouraging open discussions about neurodiversity between vet students and staff will further support a more open culture within the profession. Increasing our understanding will also allow for the creation of additional resources and support strategies that can be used on placements to benefit not only neurodivergent students, but all vet students.

## Changing model

EMS is an important part of veterinary education, but I believe the current model and overriding attitudes towards the expectations of students raise several flaws which disproportionately impact students with hidden characteristics, such as neurodiversity Intersectionality is important when discussing the challenges that students may face on placement because racial identity, gender, nationality, sexuality and disability may also be factors. The experiences of vet students on CEMS are all different, and improving the current EMS model will hopefully start to increase the overall quality and enjoyment that these placements can offer alongside the essential practical experience that they provide.

I welcome the changes to the EMS model proposed by the RCVS and believe they will be beneficial to all vet students, including those who are neurodivergent. Decreasing the number of required weeks and creating a central EMS database will hopefully prioritise the quality of placements, not the quantity, and allow opportunities to standardise requirements among practices that take students for CEMS, such as the previously suggested CPD or training related to neurodiversity.

Talking to other neurodivergent vet students about their experiences, conducting my own research and undertaking CEMS myself has highlighted the need for change and improvements to veterinary education. Being a neurodivergent vet student can sometimes feel like being a canary in a coal mine. The flaws within veterinary education that need to be improved to benefit all students seem to impact neurodivergent students first, and are more detrimental to their progress, happiness and success. The support available to neurodivergent vet students through the current EMS model needs to adapt to mirror developments in our understanding of neurodiversity, ensuring that EMS placements are beneficial to neurodivergent individuals and evolve into a more efficient experience for all vet students in the UK.

The opinions expressed in this article are my own and do not represent those of all neurodivergent vet students or the University of Nottingham.

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From learning to design and execute a research study from start to finish, to travelling abroad and meeting experts in the field of animal welfare, undertaking a student research project can be really rewarding and beneficial to your studies and future career. Past recipients of AWF's student grants have gone on to become vet surgeons, scientists, wildlife veterinarians, lecturers, vet nurses and more!

Kerry Long, a past AWF student grant recipient and now a postdoctoral scientist at The Pirbright Institute, said: 'As a veterinary student, this was the first time I felt as if I was actually making a difference for animals and their welfare.'

Ellie Miller, a student at Nottingham university, received an AWF grant in 2022 and said that her project 'was a fantastic opportunity to deepen



Investigating imported rescue dogs' health and behaviour issues, which looked at the issues presented to vets when dogs are rehomed from abroad, the prevalence of dogs from abroad in the UK domestic canine population and whether these practices are causing an increase in disease risks imported into the UK.

• Exploring the impact of human behaviour change on welfare, which aimed to determine whether and how farmers perceive pain in calves and the motivators and barriers to farmers providing pain relief to those calves. This knowledge would inform veterinary surgeons' strategy in implementing the best evidencebased treatment protocols on farms. • Focusing on the human-animal bond by studying the relationship between zookeepers and the animals they care for, which provided some insights into how zookeepers and animals interact and how it impacts animal management and welfare in zoos.

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## Putting animal welfare at the heart of veterinary science

# Should snitches really get stitches?

Niamh Casstles (University of Cambridge)

THE phrase 'snitches get stitches' is believed to have originated from American gang culture – incarcerated gang members who 'snitched' would be met with physical violence.<sup>1</sup> In a modern context, the phrase reflects the same sentiment – that whistleblowers who stand up to give an accurate account of events will face repercussions. But does this have any relevance in today's veterinary industry?

I would argue that it does.

Professional 'snitching' is actively encouraged in other industries where safety is critical and lives are at stake, for example within nuclear power and aviation.<sup>2</sup> However, it remains unpopular in both the veterinary industry and in medicine although there is some acknowledgement of the lack of, and need for, adverse event reporting in medicine.<sup>3</sup>

The concept of significant event reporting is not as widely discussed in veterinary medicine. However, we can consider both harmful incidents – 'any accident which results in harm to a patient' – and near misses – 'any accident which could result in a complaint...or would have caused harm but is noticed before it impacts the patient' – as described by the VDS.<sup>4</sup> Events like these are motivators for learning in other industries and I believe they could play a more critical role in veterinary medicine.

## Fear of speaking up

However, voluntary reporting may be an extremely daunting prospect in a profession with an ongoing mental health crisis.

The resistance towards voluntary reporting was coined as 'defensive medicine' and is at least in part attributed to the fear of being struck off, which is compounded by the perceived lack of transparency surrounding the internal processes within the disciplinary structures of the  $\rm RCVS.^5$ 

Patient safety should be our continuous priority; we have a duty to animal welfare. Therefore, we have a duty to report.

As a profession, we must remove the fear surrounding voluntary reporting, provide adequate and robust adverse event reporting systems, and work towards a more transparent disciplinary system. It is vital that we empower vets to speak up, so that we can learn and improve rather than considering these events as 'mistakes' and allowing them to become barriers to discussion.

## **Finding a solution**

So, what is the solution? How can we encourage more vets to engage with voluntary reporting?

I believe that we need to change the attitude towards reporting events; a culture described as one of 'blame and shame' acts as a barrier to reporting.<sup>2</sup> Equally, there is a need for more transparency: vets should know what will happen when they speak up and it should not include 'blame' or 'shame' but rather a healthy attitude towards learning and improving.

There should be less fearmongering over the consequences of making a mistake and more teaching on how to handle the after-

■ The 'Views and Opinion' section in JAVS is a place to share your thoughts on issues of interest. The opinions expressed by individual students may not reflect the official position of AVS or BVA. math. Now especially, with many vets leaving the profession due to mental stress and burnout, cultivating a more open culture surrounding adverse event reporting as well as building a supportive and constructive learning space and support structure may help to create a better working environment for all vets involved.

Throughout vet school we are presented with 'cautionary tales' of mistakes made within our profession. Much of the time, however, these are not accompanied by advice on how they could have been put right. Rather they inspire a feeling of judgement or fear of making similar mistakes once we begin working in practice and are presented with the responsibility of making significant clinical decisions.

By changing the attitude and structure surrounding adverse event reporting, to one of support and growth, we can utilise the reporting of these adverse events to better our clinical outcomes, and ultimately our patient care.

I have been keenly reading about 'VetSafe' recently, some VDS software that I hadn't previously come across, but which is designed with these ideas in mind. VetSafe is intended for significant event monitoring to better patient outcomes but also to support the 'second victim' in each of these events, the clinician involved.<sup>6</sup>

VetSafe shows promise, with outcomes from a four-year partnership showing significant improvements within clinical care.<sup>7</sup> I am, however, saddened that I have managed to make it to my fifth year of vet school without coming across this software before now. I think that it is something we should all consider utilising, for the bet-

## VIEWS AND OPINION

terment of many aspects of our profession.

Perhaps, instead of wondering whether snitches should be getting stitches, we should all think more on how a stitch in time saves nine!

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## **BOOK REVIEW**

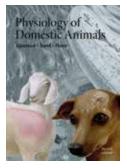
## **Building solid foundations in physiology**

## Physiology of Domestic Animals, 2nd edn

Oystein V. Sjaastad, Olav Sand, Knut Hove 807 pages; Scandinavian Press, 2010. ISBN: 978-82-91743-97-3

Reviewed by Phoebe Sussman (University of Bristol)

This textbook is a great source of information for gaining a solid foundation in physiology, helping to make those confusing physiology lectures a bit easier to understand! It



is full of useful diagrams, which really help you to visualise different physiological phenomena. If, like me, physiology does not come naturally, this book helps to explain physiological processes in a way that makes them easier to understand, without oversimplifying them.

The book was very useful throughout the preclinical years of my degree and still has its uses in my clinical years, particularly as a reference for reviewing the relevant physiology underlying various veterinary conditions (for example, ventilation perfusion mismatch is a very important physiological phenomenon to consider during anaesthesia). However, because there are no sections in the book that make overt links to clinical work, I believe it is less relevant for the clinical years of the degree – although it's still a great book to return to if you feel like revising a bit of physiology.

## **BOOK REVIEW**

## Useful pocket guides – with a few caveats

## Mini Vet Guide: Companion Animal Medicine

Gerardo Poli https://minivetguide.com/shop/ minivet-guide/



miniVET guide

Reviewed by Micaela Strada (University of Edinburgh)

This is an extremely useful pocket guide that provides practical information for small animal practice. It's a great reference and is loved by final-year and EMS students worldwide. It gives a good guideline and reference point for loads of common diseases and I've personally found it great as a fast, accessible source of information during placement. It's helped me gain confidence when talking to clinicians, which I have really appreciated. But, be warned, many vets I have talked to say that people can rely on it too much, and that it takes away from the importance of remembering clinical information. I have also heard that it contains some mistakes. So, although it is great as a guide, it is good practice to also rely on your own knowledge and have in mind that some information in the book may be incorrect.

## Mini Vet Guide: Equine Medicine

Gerardo Poli, Lucy Cudmore https://minivetguide.com/shop/ minivet-guide-equine-medicine/

Reviewed by Phoebe Sussman (University of Bristol)



Like the companion animal version, the Mini Vet Guide: Equine Medicine is a great resource to carry with you on EMS. It fits in your pocket and provides a concise overview of common diseases and disease presentations in equine medicine. The equine medicine guide is a bit smaller than its small animal partner, but it still manages to cover a range of topics (such as colic, respiratory disease, parasitic disease and wound management) well as providing flowcharts to help you approach bleeding, diarrhoea, jaundice/icterus, pyrexia, respiratory distress and weight loss.

Similarly to the companion animal guide, you would be wise not to entirely rely on this book. However, I do believe it provides a good source of information to help you review problems quickly when you are on the road.

## **One Health: a new perspective**

Jess Wilson (University of Surrey)

'ONE Health'. A phrase that is being increasingly incorporated into the veterinary literature and our lecture slides. We have all seen the diagrams depicting the unison of animal, human and plant health and probably have some vague acknowledgement of our interconnectedness but a recent trip to Uganda, hosted by Makerere University, showed me that it is much more than that.

Although often unrecognised, the veterinary role and responsibilities extends way beyond the consult room – from food safety, zoonotic disease transmission and sadly even biological warfare, to providing evidence-based literature to support policy change and implement stronger animal welfare laws. What hit me in Uganda was that our greater potential to make an impact also comes with a greater responsibility. If we really want to make the world a better place for animals, we need to look at the bigger picture and maybe



Acaricide treatment in cattle: theileria is a big problem in production animals



Zebras moving into farmland bring the potential spread of brucellosis and anthrax to cattle

start to challenge the narratives of contemporary ideologies.

Uganda, which has suffered from colonialism, continued resource exploitation and historical political instability, boasts an abundant and diverse ecosystem of animals and vegetation and there are few places on Earth where the human-wildlifedomestic animal interfaces are so

> closely intertwined. Thus the many responsibilities of a vet are magnified – both by the overwhelming number of diseases (by UK standards) resulting from climatic and human-induced factors, and by the uneven distribution of wealth within a delicate economy, which leaves few resources and limited capital directed towards the veterinary sector.

> During our trip we visited a range of human and animal medical facilities, government laboratories, National Parks, farms and food production facilities, and grassroots community projects. We also got involved in disease surveillance activities, sample analysis, biological fieldwork and some basic clinical work.

> This gave us exposure to the diversity of confrontations that can occur at the

ever-intensifying human-animal interface. Crocodile attacks are common because of competition for land and water; rare mammalian and avian species are becoming even more vulnerable thanks to an increasing rate of deforestation and loss of habitat; wildlife is subjected to death and injuries through illegal poaching and hunting; and both people and animals face a growing threat of infection from vectorborne zoonotic diseases such Rift Valley fever, Marburg, Ebola virus and Crimean-Congo fever:

Mitigating these risks and resolving the tensions can feel overwhelming – the issues are complex, deeply root-



Treating animals in the zoo hospital – victims of poaching and illegal exportation

## VIEWS AND OPINION



Sorting through the catch from LakeVictoria

ed and intersecting and the growing human population puts additional pressure on space and infrastructure as well as increasing demand on food production and health systems.

### **Difficult balance**

A crucial piece of the puzzle was the community engagement sessions that offered us an opportunity to speak with local villagers and school children. Visiting communities in Kampala, Lake Victoria, Queen Elizabeth Park and Kibale National Park, we got to discuss some of the risks and benefits of living and farming in such close proximity to wildlife. We soon discovered the difficult balance between protecting wildlife while maintaining people's livelihoods and promoting the sustainable development of critical infrastructure to provide the population with life-sustaining services such as clean water (which currently only 16.65% of the Ugandan population has access to).

These meetings showed me some entirely new perspectives that I hadn't considered before and left me with far more questions than answers. For instance, while it is valid that there should be law enforcement to stop excessive felling of trees in the forest, in a region where only 45% of the population has access to electricity,<sup>2</sup> without firewood, how can people cook food, heat water for washing and have light to see?

Similarly, while there should be consequences for people who deliberately harm animals, consider the farmer who had his whole crop, which sustains his family and neighbours for the entire year, trampled into obliteration by a herd of elephants; his children no longer go to school because they have to stay and guard their family fields. Is some form of noninvasive animal deter-

rent system warranted?

Also, marine life needs to be protected for a healthy ecosystem but legislation restricting local people's fishing rights should not prevent them making vital personal income or further contribute to food insecurity in impoverished communities. Surely this just pushes people further into desperation and leaves them few options but to find other ways to survive, such as poaching?

### **Need for solutions**

It struck me that there was a vast difference in the standard of living between the locals and foreign visitors and, although there are many organisations and schemes doing amazing work, I started to see that some conservation initiatives seemed to aim to appease safari tourists rather than contribute to a more cohesive, sustainable relationship between local people and animals. It became apparent that solutions cannot be derived from limiting, restricting or even punishing the existence of the indigenous human population in the name of animal protection.

Cruelty or violence towards animals is inexcusable no matter the circumstances; however, when we set out to mitigate animal suffering, we must not ignore the fact that poverty, combined with the ongoing climate crisis that is disproportionately affecting the global South, can be a driver of human-wildlife conflicts and contribute to limitations in the provision of animal care. Hence, we need to embrace the One Health approach and pursue multidisciplinary collaborations considering economic, political and cultural perspectives alongside using our scientific expertise to maximise the input we have.

In this age of globalisation there are seemingly endless opportunities for us vets to forge careers anywhere in the world, working with a multitude of species. As vets are coming under increased public scrutiny, we should not forget the significant contribution we make to society by providing life-changing and sometimes lifesaving care to pets and production animals. It should also not be forgotten that, as our role enables us to impact the lives of animals at both an individual and a herd level, we directly and indirectly impact the lives of people, too – whether we intend to or not.

Likewise, we must also acknowledge that human behaviour trends and circumstances have direct and indirect effects on animal health and well-being and consequently impact us, too. Every clinical decision we make is influenced in some way by circumstances far beyond the realms of veterinary medicine - the availability of pharmaceuticals, cultural attitudes towards vets and animals, and the geopolitics of our working environment all affect our capacity to care for our patients. We need to recognise this as we enter the workforce and adopt a fundamentally unified One Health attitude as we navigate the challenges of the current, ever-more integrated world.

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# All feelings big and small

Trinity Dockery (UCD)

WHEN I first heard of mental health as a concept, I felt that I didn't need to engage with it, having managed to get into vet school without any major mental health scares. I believed that my mental wellbeing was fine and dandy. But it turned out that, actually, I wasn't fine after all – and I wouldn't have much to write here if I were.

When I struggled with my mental health, it was insidious. It doesn't matter what background you come from, your mind and body will reveal what you are ignoring one way or another. I hope that anyone reading this will recognise their struggles and seek help a lot sooner than I did.

For context, here is some information about my background. I have three cats, Jellybean, Moo Moo and Toby. I come from a single parent household in Wicklow. I grew up in Meath and then I moved to Dublin for a year. I cannot remember a time when we did not struggle financially, or when I last received praise for anything which was not academically related. On the plus side, I moved about so much that you can bet I know how to make the best first impression, so long as you don't ask me where I am from.

I focused on my grades and my relationships. If they were going well, then so was I. All my confidence and self-worth were tied to my academic prowess because it was the only race that I felt eligible to compete in. I agree with you, that's really sad. It shows how we redirect and focus on something else if we feel that parts of life are too painful to deal with. I spent a lot of time in my head, sticking to my comfort zone: studying.

I got into vet school on a disadvantaged student scheme called HEAR. When I started vet school, I was always barely able to afford my bus fare. I'd want to speak to someone to start a conversation, but no words would come out. As well



as this, I'd blame my lack of hobbies for the struggles I had with making friends. Throughout my teen years, I thought that anything outside of study reduced my time to study, and I never accounted for other things that could add to my life. I tried coping with loneliness the same way I coped with all my problems; I ignored it. My grades were good, so I did well, and I could push through anything else. If all else failed, I would turn to exercise. I will tell you now, exercise is an outlet, but it is not the solution. My anxiety never went away completely after swimming lengths.

## Clean slate, fresh start?

For all of us, vet school is supposed to be a clean slate, a fresh start. However, you can't expect to ignore your backlogged mental baggage and send it on an extended holiday while you embark on a new chapter. In my case, my insecurities were heightened. During my first week, everyone immediately started talking about points and past grades before moving on to everything they were interested in outside of school. As I've mentioned, all I had to offer were my grades and that I had been 'allowed' in. It made me feel that I had not earned my place as much as others.

I also felt a lot of financial pressure as I'd had no help preparing for uni-

versity. I'd always been told to study and that life would be different in university but I had no concept of how much buses would cost per week, or that I would need to account for nights out if I wanted to socialise. Needless to say, I collected new pressures to add to my dusty, neglected collection of problems. When faced with these new pressures, I simply went to the library and ruminated unproductively on how similar I was feeling in university to how I felt pre-university.

## Panic attack

It was only during placements and the Covid pandemic that I started to see the effects of my mental health neglect. During my small animal placement, I experienced my first panic attack. I know what you may be thinking: did I incorrectly inject an animal? Did I decide to increase anaesthesia while the vet was distracted? Did I tell the owner something I shouldn't have? These are all mistakes which seem significant enough to cause an anxiety attack, but if you guessed it was actually something really small, then you'd be right. I was given tasks to do while the vet nurse was on leave for a few days, and I accidentally mopped the floor before I vacuumed. The moment I realised what I had done, my chest tightened, I couldn't breathe, my heart pounded, and I just stood immobilised. I did admit my grave error to the vet in my calmest tone and seeing she was okay with it, I could calm down.

## Not all or nothing

We all may be aware of symptoms of anxiety and depression but often we are only given extreme examples of those affected by it daily. I used to be convinced that mental health disorders were all or nothing. Over time, I have come to realise that anxiety and depression can be present at low levels, affecting your wellbeing greatly without manifesting in an extreme presentation. If you are not aware of symptoms of anxiety and depression but would be interested in becoming more familiar, I've given a link to follow in the box above.

Equally it is important to highlight that everyone's experience with mental health will be unique to them; anxiety and depression can manifest in many different ways. When anxiety and/or depression start affecting your life, it may feel like a noticeable change or it may not be pronounced at all. It may feel normal. The longer you have compensated for your mental companion, the more normal it may feel. This has been my experience of anxiety and depression, and there are ways I have spotted their presence and their inhibitory effects in my own life.

First, it did strike me as strange that I panicked over how I cleaned the floor: As an anxious person, I don't easily forget some of the things I perceive as mistakes. These moments have spun on repeat through my head like a possessed washing machine. Now, I'm enlightened to how irrational my panic was but initially I kept analysing how I could have avoided doing such a silly thing.

Certain moments continue to stand out to me. I like to think of them as water balloons being chucked in my direction. I don't know where they come from, but I am uncomfortably aware of how much I don't like the experience. I now appreciate that these moments

## Information, resources and support

• Recognising signs and symptoms of anxiety: www2.hse.ie/conditions/ anxiety-tips-and-self-help/

• Mental health support services: www.mind.org.uk/information-support/ guides-to-support-and-services/crisis-services/helplines-listening-services/

- Samaritans helpline: 116 123 (UK and Ireland)
- Women's Aid: 1800 341 900 (Ireland)
- Vetlife: 0303 040 2551, or helpline.vetlife.org.uk (UK)
- Student advisers, friends and family members

are neither good nor bad; they are moments of insight.

Second, I was isolated. I had managed to get to 21 years of age without learning how to socialise. I take no pride in any of the theories I had as to why others could make friends and I couldn't up until this point. I was not aware of how judgemental it made me. Isolation is not always the individual's fault, but it creates an environment in which it is easy to judge everyone else for their 'better' lives.

It wasn't easy to get out of this rut. At the time, it felt as if I had left my 'Guide to life' in my first bedroom in Meath, never to find the wisdom or rules it held. Instead, as I have got older. I have found that there is no right or wrong. I continue to make mistakes, but overall, I have realised that it is all within a balance. When I was dealing with mental health struggles, these judgements were exacerbated. Everything appeared as confirmation bias for my negative affirmations; everyone was using purposeful tactics against me. I could also completely prove to myself that it was my fault that I was lonely.

With hindsight, feeling isolated and being hypercritical of others is another symptom of anxiety and depression taking a dramatic effect on my daily life.

Third, I only had enough energy to complete tasks deemed necessary. This felt almost hidden when I was struggling with my mental health. I had an epiphany while I was running (prompted by watching Conor O'Keeffe's reels on Instagram; I recommend his podcast 'Flipping the script' to anyone struggling with the headache of a backseat selfcommentator). Whenever I got to a steep hill during my runs, I would occasionally give up and walk it. It hit me that my brain was taking up more energy than the rest of my organs. But it's possible to redirect that energy. When a long litany of comments came into my thought space while running, I turned them into one word, like 'dedicated', or 'determined' or 'resilient'. I also added in my music and let the lyrics be the only words in my mind. This would always give me the boost I needed. Before this, I never noticed my low energy levels. This is also why exercise may not be enough if you are struggling, because your struggles continue in your mind even when your body is being tested.

## Noticing the small feelings

Before I did finally seek help, I felt that I had to prove to myself that my mental health was significantly impeding my abilities to function. I would need an incentive (for example, a drop in grades) to seek help or take time out. It took years of pressure, isolation, poor decision making and the occasional depressive episode to force me to at least admit that I was struggling.

I no longer ignore and dismiss my small feelings. I make it my mission to build up good memories, contribute to committee work and express myself. Giving yourself a voice and recognising your feelings can be the simplest but kindest thing you can do for yourself.

I hope that sharing my journey might help you recognise when mental health is impacting your daily life. Never give up on yourself even if you are feeling discouraged with your own progress; reward yourself for what is going well and always talk to someone you trust. Everybody's experience of mental health is different and unique; no one experience is the same **6** Being able to talk to someone outside my course helped me gain extra perspective. **J** 

# Students. Vere here to listen.

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# Five tips for making the most of life outside vet school

Katie Burnett (University of Bristol)

SOMETIMES we all need to remember that there is life outside of our veterinary studies. It is so easy to get overwhelmed and bogged down with endless hours of lectures, focusing all our time on studying to get through the years of vet school. But remember, being a vet student is not your sole personality, so it is important to find activities and hobbies to do beyond the veterinary world. While at vet school, many of us get the chance to experience life in a new city, and we should make the most of the opportunities our universities provide.

Here are five suggestions that may help you to relax and unwind from studying:

## I. Restaurants and cafes

If you like food, coffee, cakes and more, visiting cafes and restaurants can provide a welcome escape from book work. Create a list of restaurants and cafes you would like to visit before you finish vet school, then whenever you need a break, you can choose from the list and try something new or return to a favourite spot. Even on a student budget there are plenty of places to hunt out for that much-needed study break.

## 2. Sport/fitness

Sport doesn't just keep us physically fit, but it can help to keep us mentally fit too.

Many universities offer a huge range of sporting opportunities for their students, and many vet schools have their own sports teams for people seeking a more relaxed sporting experience than being a part of the main university team (Caitlin Cressey's article about the vets' hockey team at Bristol, on page 13 of this issue of JAVS, is a great example).



Making time for a sweet treat

Netball and football can provide a high-paced intense workout, while something like yoga can help you unwind from your studies.

Joining a sports team or club is also a great way to meet people and make new friends, providing a community outside of veterinary medicine.

## 3. Walks/hikes

During the Covid pandemic, many of us started to get more into walking as it was one of the only ways to get out of the house. Making time to go for a short walk during the day can really help to take your mind off university work, give your eyes a break from computer screens, and help to achieve your daily step goal. A short walk can also improve your concentration and productivity.

You can make walking a sociable or solitary activity – you could even stop off at one of the cafes on your list on the way home!

Walking also allows you to

explore your university town/city better than you could ever do on a bus or in a car.

#### 4. Socials and formals

Whether you go to a sober social or a crazy sports night, there is a social for everyone. Socials are a great way to meet new people and create new friendships.

Many societies run socials. Some notable examples are sports night (if you want to go wild), formals/balls (for the more sophisticated) and sober socials (for the sensible ones). Whatever you'd like to do, there's bound to be something available.

## 5. Spend time with friends and family

While you're studying away from home, it's a great opportunity to invite friends and family to come and visit and explore new parts of your university town/city together. And, as a top tip, perhaps suggest your family do a food shop for you before they leave!

Visiting home is also important for those finding their feet at university or needing a little home comfort once in a while. We all need a break from hectic university life, and going home for a weekend can give us a chance to reset and be refreshed for the rest of the term.

So, there you have it; five things to do outside of your studies. The years we spend at university are so important. We should aim to make the most of all the new opportunities they provide and enjoy our free time the best we can (although it may sometimes be lacking). During our time at vet school, we will not only work towards getting our veterinary qualification, but we will make some of our closest friends and most treasured memories.

## Crikey! Vet student down under – the value of EMS abroad

ed to do more placements abroad

After this placement, through a very

random meeting, I got the contact

details for a vet in Australia. I had

always been interested in working

Heading down under

after this.

Ella Pears (University of Bristol)

LIFE as a vet student can be stressful and demanding at times. Finding the perfect work-life balance can be difficult especially when your free time outside of the degree quickly becomes filled up with placements. One way that I've managed to make being on placement feel a bit more adventurous is by combining my passion for travelling with my passion for veterinary medicine and carrying out some placements abroad.

Booking a placement abroad can be time-consuming and expensive to organise. It took weeks of hard work scrubbing floors in a university cafe to save up for the trips, and filling in quite a bit of paperwork to send to the EMS office! However, after having done eight weeks of placement abroad I can vouch for the value of completing EMS overseas and believe it was worth the effort.

### **First experience**

My first trip abroad for a placement was to South Africa to work with native wildlife. This was an amazing experience for two reasons: it was a great opportunity to work on my clinical skills and a great opportunity to meet vet students from other vet schools.

I loved the jam-packed days planned out for us and was more than happy to wake up at 5 am every day to jump on a game viewer. We treated lions, giraffes, various forms of antelope and even rhino!

Having not travelled much in my life before this, this trip also gave me the new experience of exploring a country. This was the perfect placement for this, as we had day excursions to local national parks which provided a well-needed break from the hard work as well as an amazing experience. I knew I want-



My first EMS placement overseas was to South Africa to work with native wildlife

in Australia after graduation and I thought it would be a good idea to at least visit the country before making such a big move. What better way to learn about the veterinary scene in Australia than through being on placement with Australian vets?

I did everything I could to make this placement happen and decided to spend a long time there to make the most of the travel costs. The next thing I knew, I was on a 27-hour flight to Sydney and spent the next six weeks shadowing small animal, farm and equine vets.

The best part about being in another country for a placement was that each weekend I could be a tourist and really get to know the country. Being around native Australians all day at the practices meant that I could fully embrace the



I would encourage anyone who is thinking about travelling to consider completing EMS abroad and to take every opportunity you can

culture and see things which tourists may never hear about – such as a kite festival and a massive bonfire with the locals!

I stayed with the vets I was working with, which helped me form strong relationships with them and kept costs at a minimum.

Some of the amazing surgeries and procedures I got to see included TPLOs (tibial plateau levelling osteotomies), splenectomies, 20-cm abdominal mass removals, MRIs and CTs, neutering, equine dentals and much more. Never underestimate Australian hospitality; staff were more than kind and helpful to me, willing to teach no matter how long it took. To the aspiring equine vets out there, Australia has a national shortage (just like everywhere) so work is easy to come by!

I hated having to leave Australia after being there for so long, and spending time with such generous and friendly people. The animals, the views and the quality of life were also convincing me to stay!

I have found it so interesting to see the differences between veterinary practice in the UK vs abroad, from the drugs they use to common cases seen. For example, seeing the exaggerated gait of a stringhalt horse, and not using the cascade to prescribe off-licence drugs.

After carrying out these placements, I want to work abroad even more and they've been a great taste of what I can expect.

Since doing these two placements, I have been looking into the future for where I may want to work, and in which speciality. I never knew how hard it would be to choose what I want to do after university; there are so many options for vets to work in different fields and countries! Finding contacts in different places has proven the most useful in finding these placements and opportunities and I will continue to keep in touch with all the amazing people I have met across the world.

Overall, I am so grateful that I have had these opportunities and realise how lucky I am to have completed placements abroad. I would encourage anyone who is thinking about travelling to consider completing EMS abroad and to take every opportunity you can. Whether you have family abroad you can stay with or whether you volunteer with a charity, there are avenues you can take to make it happen.

Most vet schools have lists of past placements students have done and have their contact details on file – sometimes all it takes is an email! Resources like the Vetbeds page on Facebook are also great ways to find cheap places to stay while on placement. It's a fantastic way to learn the culture of a new country and you may end up getting an opportunity that could change the course of your life!

## **BOOK REVIEW**

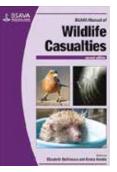
## Invaluable guide to wildlife care and rehabilitation

## BSAVA Manual of Wildlife Casualties, 2nd edn

Edited by Elizabeth Mullineaux and Emma Keeble 488 pages; BSAVA, 2016. ISBN (print): 978-1-905319-80-0 ISBN (e-book): 978-1-910443-31-6

Reviewed by Phoebe Sussman (University of Bristol)

If you're about to undertake some wildlife EMS, this book would be a very useful resource and great reference to take along with you. It provides a comprehensive overview



of British wildlife and wildlife rehabilitation and offers information about triage in the field and veterinary first aid, as well as euthanasia and anaesthesia. It also provides useful information on the management of different wildlife species when they are kept in captivity during rehabilitation, such as species-specific information on appropriate housing and nutrition. The manual contains critical information surrounding the release of wildlife casualties and post-release monitoring.

It also has a great chapter on rabbit medicine, which will be very useful for first-opinion practice.

Overall, this resource provides an invaluable guide to all stages of intervention, from the initial steps to the monitoring of wildlife casualties after release, and will really help you develop your approach to rehabilitating wildlife.

# Avoiding cryptosporidiosis and staying safe on EMS placements

Andrea Suarez (University of Glasgow)

BEFORE attending any preclinical EMS it is important to be aware of possible zoonotic infections you may come into contact with. One of these infections is cryptosporidiosis, caused by the protozoan Cryptosporidium species, which affects the gastrointestinal tract. The main zoonotic species affecting people is Cryptosporidium parvum, commonly found in young calves,<sup>1</sup> although cryptosporidia can also be found in many other species and in bodies of water. However, in this article I will focus mainly on C parvum. I particularly want to highlight the importance of biosecurity and good hygiene during EMS placements as I was unfortunate enough to contract cryptosporidiosis and ended up in hospital for five days. For this reason, I feel it is vital for others to know about the disease, its symptoms and how you can reduce your chances of contracting it.

## Lifecycle

First, you need to understand the lifecycle of *C parvum* and where you may come into contact with it on your EMS placements. The transmission of *C parvum* is predominantly via the faeco-oral route, which can happen either directly, through contact with the faeces of infected hosts, or indirectly, through the consumption of tainted food or water, or by coming into contact with contaminated environments.

With its entire lifecycle unfolding in less than three days, *C parvum* begins its life as sporulated oocysts excreted by infected hosts. Once ingested by a new host, the oocysts rupture, releasing four sporozoites each of which attach to and invade the new host's epithelial cells of the intestinal wall. Once here, the sporozoites will develop into a spherical trophozoite. The trophozoites undergo schizogony, a form of



Cryptosporidium parvum oocyst releasing sporozoites

asexual reproduction, to form their next life stage, merozoites. These invade more epithelial cells resulting in the formation of type I and type 2 meronts.

Type I meronts form eight merozoites which invade more epithelial cells and either complete another cycle of type I merogony, or mature into type 2 meronts. Type 2 meronts form four merozoites and differentiate into either male microgamonts or female macrogamonts. The male microgamonts rupture, releasing microgametes and fertilising the female macrogamonts, forming a zygote. Following meiosis, the zygote matures into a sporulated oocyst containing four sporozoites.<sup>2</sup> Around 20% of the oocysts are thin walled and rupture, causing selfinfection. The other 80% are thick walled and go on to be excreted in faeces, ready to infect another animal.3

### Symptoms of infection

Clinical features of cryptosporidiosis vary, especially between those who are immunocompetent and those who are immunocompromised. Symptoms usually last two weeks, with the most frequently seen clinical feature being diarrhoea, which is also the predominant symptom supporting a diagnosis of cryptosporidiosis. Other less common symptoms include abdominal pain, nausea, vomiting and low-grade fever.<sup>4</sup>

The effects and duration of infection ultimately depend on the immune status of the patient. Young children and pregnant women have a greater risk of more severe symptoms because they are more prone to dehydration caused by diarrhoea. This is also the case for those with seriously weakened immune systems, such as people with HIV, AIDS, or transplant patients.<sup>5</sup>

In my case, I suffered severe abdominal cramping, vomiting and extreme diarrhoea. Initially, I lost a large volume of fluid which caused my blood pressure to drop – I felt extremely faint and dizzy – and I required fluid therapy in hospital. Over the course of several days, I experienced continued low blood pressure, abdominal pain and appetite loss. While the main symptoms had passed by the time I was released from hospital, I continued to feel lethargic and weak for the next week.

### Staying safe

The best way of preventing cryptosporidiosis is through practising good hygiene. Washing your hands with soap and warm water multiple times throughout the day (and not just when they feel mucky) is vital. Be aware that alcoholbased sanitisers do not effectively kill Cryptosporidium so are not an alternative to soap and water.<sup>5</sup> Of course, you should always wash your hands every time after handling cattle or interacting with their surroundings, such as hay, milk jugs or fences. It is also vital to wash your hands after taking your clothes off at the end of the day.

I also want to highlight the importance of thoroughly washing your water bottle and cleaning your phone using hydrogen peroxide wipes – using personal objects when you return to your accommodation after having them at the farm will pose the risk of contamination even if you practise good handwashing etiquette.

Continuing on this theme, if you are unfortunate enough to get infected, you (and anyone looking after you) should take measures to reduce the chances of spreading the parasite. When cleaning up vomit or faeces, always wear PPE, such as gloves, and wash your hands after thorough cleaning. Make sure you also wash (on hot) bedsheets, clothing and any other items that may have come into contact with the parasite. If you're living in a household with others, it may also be worth using separate towels in the bathroom rather than sharing, and cooking only for yourself until you have been free of the infection for at least 48 hours. As a general rule, those with cryptosporidiosis should avoid attending work or school for at least 48 hours after all symptoms have passed.<sup>6</sup> Infected individuals should refrain from swimming in bodies of water until the infection has resolved.

## What to do if you show symptoms

If you start experiencing any symptoms of cryptosporidiosis, the first step to take is to drink plenty of fluids, as this parasite leaves you at risk of severe dehydration. Avoid drinks that may worsen dehydration such as alcohol and caffeine. If your symptoms develop, going to your GP is a sensible next step, as they are able to prescribe medication to counter diarrhoea. Calling III for advice is an alternative option if you are worried or anxious.

You should also be aware that cryptosporidiosis is a notifiable disease meaning that if it is suspected you have the infection, then you must report it and get it checked as soon as possible. Healthcare providers and laboratories that diagnose cases of cryptosporidiosis have to report them to the UK Health Security Agency (UKHSA), which provides advice on controlling outbreaks and monitors them to find sources of the infection. In my experience, following my diagnosis I received multiple phone calls from the UKHSA to understand how I got the parasite and who I might have come into contact with after initial infection. Be prepared to provide a detailed anecdote of your own experience!

## Conclusion

In summary, *C parvum* is an extremely contagious parasite that can be caught through working with farm animals. I experienced the full effects of the parasite and would warn anyone working with farm animals to be cautious, as it was far from pleasant. Make sure you know the possible routes of contamination and practise effective hygiene measures to stay safe while on placement. Remember also that there are many other infections you might pick up while on EMS placement, the risk of which can be mitigated in a similar manner.

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## **BOOK REVIEW**

## **Concise summaries of common cattle surgical procedures**

## Bovine Surgery and Lameness, 3rd edn

A David Weaver, Owen Atkinson, Guy St Jean and Adrian Steiner 384 pages; Wiley-Blackwell, 2018. ISBN: 978-1-119-33373-9

#### Reviewed by Rosie Clayton (Nottingham senior rep)

#### If, like myself and my peers, when

heading out on clinical EMS placements you often feel overwhelmed by trying to memorise the steps that the vet is taking during common procedures, this book has been found to be particularly useful in providing concise summaries!

The book begins with general considerations for bovine medicine and surgery, plus an excerpt on anaesthesia.

It then progresses to fluid and supportive therapy 'cheatsheet' type pages offering summaries of the topic and clear explanations as to when you would choose different products and why. Following a body systems approach throughout the book, it outlines the common (and less common) procedures seen in the bovine side of farm animal practice, from the preparation for surgery through to the supportive care required after.

I particularly liked the diagrams that aimed to help with understanding as they could be easily reflected onto the anatomy seen before me. Easy to keep in your car door or bag on EMS placements, this comprehensive book is handy to use for prompts before visits or as part of exam preparation. It also comes with access to an accompanying website offering videos of procedures and annotated PDF documents of the videos.

Overall, I would highly recommend this book and think that it is very good value for money. It already has a space in my car door ready for future clinical EMS placements!



# **Calling all final-year students!**

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## **BOOK REVIEW**

## Beautifully illustrated anatomy learning resource

Saunders Veterinary Anatomy Flash Cards, 2nd edn

Baljit Singh 400 flash cards; Elsevier, 2015. ISBN: 978-1-455776832

Reviewed by Phoebe Sussman (University of Bristol)

These flash cards are not only beautiful, with full-colour anatomical illustrations, but they provide a great learning



resource to help you master anatomy. They are easy to take with you and study on the go. If you've got an upcoming spot test, these cards will be invaluable in preparing for it! Having a solid anatomy knowledge is vital, not only to get through the preclinical years, but as a basis to understand surgery and various pathologies.

Within this set, there are 490 different illustrations covering the anatomy of the thorax, abdomen, musculoskeletal system, neurological system and urogenital system in dogs, cats, horses, cows and exotic species. They go into a bit more detail than would be expected during veterinary exams, but I would highly recommend them to anyone, not only as a study resource but also as a collection of aesthetically pleasing anatomy diagrams.



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