SPOTLIGHT ON
University of Bristol Veterinary School
Innovative approaches in teaching the next generation of veterinarians.

Inspiring the next generation of veterinarians at Bristol Veterinary School

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"To create and sustain a culture in the School that nurtures success and promotes excellence in research and teaching" is part of the Bristol Veterinary School (BVS) mission; this article highlights some of the innovations in education which support student learning and development.

Focus on Spectrum of Care Within the Veterinary Teaching Hospitals

In 2017, BVS developed the new role of "Veterinary Clinical Demonstrator." These roles are held by a team of 12 experienced primary care practitioners with expertise in teaching, complementing the clinical teaching provided by specialists. Clinical demonstrators work with specialists and students to ensure that there are opportunities for students to explore a broad spectrum of care and develop day one competences within the referral environment. They also contribute substantially to the delivery of practical teaching in the wider curriculum, consistently enhancing student learning and experience.

Practical Teaching Innovations

The internationally recognized Clinical Skills Laboratory, set up by Professor Sarah Baillie, continues to evolve. All the laboratory booklets are available online (https://www.bristol.ac.uk/vet-school/research/comparative-clinical/veterinary-education/clinical-skills-booklets/) and were viewed 1,148 times in a 2-week period (May 2022). Academics work closely with a superb technical team who won "Best Poster" and "Best Workshop" at the 2021 VetEd Symposium. The pandemic accelerated the rollout of a planned flipped classroom approach, inspiring an ongoing research project. The latest addition to the laboratory is a "Virtual Patient," a high-fidelity simulator enabling students to apply their practical, professional, and problem-solving skills to emergency cases in a safe and supportive environment. Feedback on the immersive experience has been overwhelmingly positive.

The response to the pandemic unleashed creativity and innovation, in particular the requirement to develop inclusive resources, which could be used by students who were isolating. Streaming and recording of anatomy practicals were facilitated by the use of a Hololens, ensuring student access to dissection material remotely. Hololens technology, along with other innovations such as streaming of ultrasound images, was also used in the veterinary teaching hospital to overcome the challenges associated with reduced room capacities due to social distancing.

Novel Case-Based Learning

Our 4-year Accelerated Graduate Entry Programme makes extensive use of case-based learning in years 1 and 2, using the 7-step method developed by Maastricht University.[1] The 7-step approach requires students to explore a veterinary problem in depth, identifying what they need to know to progress through the case and working together to collate relevant information and highlight any ongoing queries prior to a "Meet the Expert" wrap-up session at the end of the week.

Comprehensive Veterinary Public Health Experience

One of the most popular final-year rotations is Veterinary Public Health (VPH). Bristol is unique among the UK vet schools in having an abattoir on site to support core teaching. To complement the final-year rotation, an online "virtual abattoir" has been developed to expand the breadth of experience offered. This resource has been shared with other veterinary schools and has been described as a "masterpiece in education" by a colleague at another school. Additionally, students selecting VPH as an elective have the opportunity to gain an Official Veterinarian qualification.

Excellence in Research

Exposure of students to research is integral to the program; Bristol Veterinary School was the top UK veterinary school for research impact in the 2021 Research Excellence Framework. The real-life applicability of the research in areas such as antimicrobial resistance and sustainability is integrated into teaching and students have opportunities to engage in projects. BVS staff led the Royal College of Veterinary Surgeons Knowledge–funded evidence-based veterinary medicine project, designing and evaluating the website www.ebvmlearning.org; this resource is freely available and embedded within the BVS curricula. Robust evaluation of teaching methods is pivotal to future developments, and many of the innovations described above are included in research projects for dissemination within the profession. Since 2016, the Veterinary Education Research team has published over 30 peer-reviewed papers and 70 conference contributions.

References

1. Wood DF. ABC of learning and teaching in medicine: problem-based learning. *Br Med J.* 2003;326(7834)328–330.