

PROFESSIONAL ACHIEVEMENTS

- 2021 - current **Lecturer** in Animal Welfare Science and Animal Behaviour, The University of Sydney.
- 2017 - 2021 **Postdoctoral Research Fellow** in Livestock Welfare, The University of Sydney.
- 2021 **Fellowship of the Higher Education Academy (Fellowship reference PR210683)**, Advance HE.
- 2019 - 2020 **Graduate Certificate in Educational Studies (Higher Education)**, The University of Sydney.
- 2013 - 2017 **PhD: Practical anaesthesia and analgesia for castration and dehorning of extensively managed beef cattle**, The University of Sydney.
- 2009 - 2013 **Bachelor of Animal and Veterinary Bioscience (Hons 2:1)**, The University of Sydney.

RESEARCH GRANTS

Since finishing my PhD in 2017, I have established my position as lead investigator on a category 1 grant (Meat and Livestock Australia Donor Company, AUD832,332) and Chief Investigator on a category 3 grant partnered with industry (Medical Ethics Pty Ltd, AUD34,720). I have also received philanthropic funds for a research proposal as Chief Investigator.

2020 – Current Philanthropic gift funded through the **USA Foundation** (USD \$75,000): Novel pain and wound management strategies for husbandry procedures in sheep and cattle. Chief Investigator.

2019 - Current **Meat and Livestock Australia** grant (subcontracted through University of Queensland) (AUD104,080): *Cattle tick and buffalo fly host genetics, susceptibility to buffalo fly lesions and biomarkers for resistance*. Co-investigator (CI Cameron Clark).

2018 - Current **Medical Ethics Pty Ltd** grant (AUD \$34,720): *Developing a self-medication strategy for practical delivery of long-lasting analgesia to cattle*. Chief Investigator.

2017 - Current **Meat and Livestock Australia** grant (AUD \$832,000): *Improving animal welfare in the red meat industry – pain relief*. Lead Investigator (CI Peter White).

2013 - 2017 **Meat and Livestock Australia** grant (AUD \$300,000): Pain management during aversive procedures in extensively raised beef cattle. PhD scholarship.

2014 **University of Sydney Stock and Meat Industries Grant-In-Aid** (AUD \$750): Postgraduate student grant in aid.

AWARDS, PRIZES AND ACHIEVEMENTS

2021 NSW State Finalist in *FameLab*.

2021 Runner up Early Career Researcher video presentation prize (AUD \$200) for the 'Give you a minute' competition at the 2021 Australian Association of Animal Sciences conference.

2021 Invitation to participate at the *Global Young Scientists Summit*.

2018 International award, 'Care4Cattle', worth €10,000 and funded by Bayer Animal Health.

2018 National conference presentation prize to support collaborative research, '2018 Collaboration Across Boundaries Presenter Prize', worth AUD3,000 and funded by The Theo Murphy Initiative through the Australian Academy of Science.

SERVICE TO THE DISCIPLINE

2019 - Current *National Primary Industries Animal Welfare RD&E Strategy (Commonwealth of Australia's National Primary Industries Research, Development and Extension (RD&E) Framework)* - University of Sydney representative committee member. Responsibilities include organising the annual NAWRDES forum.

2019 - Current *National Committee for Agriculture, Fisheries and Food (Australian Academy of Science)* - Early-mid career researcher committee member.

CONSULTANCY

2019 Desktop study for RSPCA Australia. Formulation of a literature review to inform a position paper for the RSPCA on invasive husbandry procedures in farm animals.

ACADEMIC SERVICE

2021 – Current **Research Advisory Committee Early Career Researcher member**, Sydney School of Veterinary Science, The University of Sydney. Inform researchers and staff in the School on research-related matters and provide input to development of research-related strategies, procedures and initiatives at University and Faculty levels.

2020 – Current **Mentor**, The University of Sydney. Mentorship for PhD students through the University of Sydney's Science Mentoring Program and for an Indigenous animal science trainee through AFL SportsReady Education and Employment.

2019 – current **Professional experience research placement supervisor**, The University of Sydney. Supervision of and research training for Animal and Veterinary Bioscience students conducting research professional experience placements.

2019 – current **Panel chair and member for HDR progress reviews**, The University of Sydney. Progress support for postgraduate students.

PEER REVIEWED JOURNAL ARTICLES

My high impact research publications demonstrate an upward trajectory since finishing my PhD in 2017, with 7 of 10 papers (6 of which I am first author) published between 2018 and 2021. My h-index = 6 and my citations have increased from 2 in 2016 to 28 in 2020/2021.

1. Harris, C., White, P., Hall, E., **Van der Saag, D.** and Lomax S. (2021). Evaluation of Electroencephalography, behaviour and eye temperature in response to surgical castration in sheep. *Animals*, 27(11), doi:10.3390/ani11030637.
2. Yu, A., **Van der Saag, D.**, Letchford, P., Windsor, P. and White, P. (2020). Preliminary investigation to address pain and haemorrhage following the spaying of female cattle. *Animals*, 10(2), doi:10.3390/ani10020249.
3. Woodland, A., **Van der Saag, D.**, Kimble, B., White, P., Govendir, M. and Lomax, S. (2019). Plasma pharmacokinetic profile and efficacy of meloxicam administered subcutaneously and intramuscularly to sheep. *PLoS One*, 14(4), doi:10.1371/journal.pone.0215842.
4. **Van der Saag, D.**, Lomax, S., Windsor, P., Hall, E., White, P. (2019). Effect of lignocaine and a topical vapocoolant spray on pain response during surgical castration of beef calves. *Animals*, 9(4), doi:10.3390/ani9040126.
5. **Van der Saag, D.**, Lomax, S., Windsor, P., Taylor, C., Thomson, P., Hall, E., White, P. (2018). Effects of topical anaesthetic and buccal meloxicam on average daily gain, behaviour and inflammation of unweaned beef calves following surgical castration. *Animal*, 12(11), 2373-2381.
6. **Van der Saag, D.**, White, P., Ingram, L., Manning, J., Windsor, P., Thomson, P., Lomax, S. (2018). Effects of Topical Anaesthetic and Buccal Meloxicam Treatments on Concurrent Castration and Dehorning of Beef Calves. *Animals*, 8(3), 1-16.
7. **Van der Saag, D.**, Lomax, S., Windsor, P., Taylor, C., White, P. (2018). Evaluating treatments with topical anaesthetic and buccal meloxicam for pain and inflammation caused by amputation dehorning of calves. *PLoS One*, 13(6), 1-12.
8. **Van der Saag, D.**, Lomax, S., Windsor, P., White, P. (2016). Effect of a topical anaesthetic formulation on the cortisol response to surgical castration of unweaned beef calves. *Animal*, 10(1), 150-156.
9. **Van der Saag, D.**, Windsor, P., Harris, C., Lomax, S., White, P. (2016). Effect of Topically Applied Anaesthetic Formulation on the Sensitivity of Scoop Dehorning Wounds in Calves. *PLoS One*, 11(9), 1-13

10. Espinoza, C., **Van der Saag, D.**, White, P., Windsor, P., Lomax, S. (2016). Evaluating the efficacy of a topical anaesthetic formulation and ketoprofen, alone and in combination, on the pain sensitivity of dehorning wounds in Holstein-Friesian calves. *Animal Production Science*, 56(9), 1512-1519.

REVIEWING SERVICES

2019 - current **Peer reviewer** for scientific journals *Animals* and *PlosOne*.

2020 - current **Guest editor** for scientific journal *Animals*.

CONFERENCE PROCEEDINGS

Oral presentations

1. **Van der Saag, D.**, Garling, E., White, P., Kimble, B., Govendir, M. and Lomax, S. (2021). Developing a self medication strategy for practical delivery of long-lasting analgesia to cattle. 2021 Australian Association of Animal Sciences Conference, online.
2. White, P., **Van der Saag, D.**, Lomax, S., Windsor, P., Govendir, M. (2018). Pain relief in Australian Cattle; Where to from here? Multimodal and extended pain relief in cattle. *World Buiatrics Congress*, Sapporo, Japan.
3. **Van der Saag, D.**, Yu, A., Letchford, P., Windsor, P. and White, P. (2018). Preliminary investigation to address pain and haemorrhage following spaying via the Willis Dropped Ovary Technique in heifers. *World Buiatrics Congress*, Sapporo, Japan.
4. **Van der Saag, D.**, White, P. and Lomax, S. (2016). The use of event logging software for collection and analysis of behavioural data in pain studies on beef calves undergoing castration and dehorning. *Spatially Enabled Livestock Management Symposium*, Sydney, Australia.
5. **Van der Saag, D.**, Harris, C., Lomax, S., White, P. (2015). The effect of topical anaesthetic on the sensitivity of dehorning wounds and the effect of topical anaesthetic in combination with meloxicam on the cortisol response to dehorning in unweaned beef calves. *Congress on Controversies and Consensus in Bovine Health, industry and Economics (CoBo)*, Berlin, Germany.
6. **Van der Saag, D.**, White, P., Lomax, S. (2014). Effect of Topical Anaesthesia on the Cortisol Response of Beef Calves to Castration. *World Buiatrics Congress*, Cairns, Australia.

Poster presentations

1. **Van der Saag, D.**, Mithieux, S., Weiss, A. and White P. (2018). Improving animal health and welfare in extensive livestock industries: A collaborative solution between veterinary science and human biomedical engineering disciplines. *Collaboration across boundaries 2018 – A Theo Murphy Initiative*, Canberra, Australia. **Winner of poster presentation.**
2. **Van der Saag D.**, White, P. and Lomax, S. (2016). The effect of novel pain relief on average daily gain of beef cattle following concurrent dehorning and castration. *ISAE Regional Meeting*, Auckland, New Zealand.
3. Lomax, S., **Van der Saag, D.**, White, P. (2016). Comparing the effects of intranasal and intramuscular administration of xylazine on the pain response of calves. *World Buiatrics Congress 2016*, Dublin, Ireland.
4. **Van der Saag, D.**, Lomax, S., White, P. (2016). Efficacy of a topical anaesthetic (TA) and a buccal non-steroidal anti-inflammatory drug (NSAID) for pain relief of surgically castrated calves. *World Buiatrics Congress 2016*, Dublin, Ireland.
5. **Van der Saag, D.**, Lomax, S., White, P. (2016). Novel methods to alleviate the peri-operative and post-operative pain of amputation dehorning in beef calves. *World Buiatrics Congress 2016*, Dublin, Ireland.
6. **Van der Saag, D.**, Lomax, S., White, P. (2016). The effect of a topical anaesthetic and a buccal non-steroidal anti-inflammatory drug on inflammation, wound healing and average daily gain of surgically castrated calves. *UFAW Animal Welfare Conference*, York, UK.
7. Harris, C., **Van der Saag, D.**, Lomax, S., White, P. (2016). The Effect Of Topical Anaesthetic On The Sensitivity Of Scoop Dehorning Wounds In Beef Calves. *World Buiatrics Congress 2016*, Dublin, Ireland.

RURAL PRESS COVERAGE AND COMMUNITY OUTREACH

March 2020 Interviews and stories featured in *The Land*, *Queensland Country Life*, *Farm Weekly* and *North Queensland Register* **news articles** – “Blocks have pain relief licked”

1. <https://www.theland.com.au/story/6696682/blocks-have-pain-relief-licked/?cs=4933>
2. <https://www.queenslandcountrylife.com.au/story/6696682/blocks-have-pain-relief-licked/>
3. <https://www.northqueenslandregister.com.au/story/6696682/blocks-have-pain-relief-licked/?cs=4744>

March 2020 Interview on research project featured on *Bayer Animal Health YouTube channel* – “Care4Cattle: Dr Dominique Van Der Saag on her winning project”
<https://www.youtube.com/watch?v=1kaLSalQ2NU>

2014 – 2019 **Activity co-ordinator** at the University of Sydney Camden campus open day. Design, co-ordination and implementation of discussion and activities on livestock health and husbandry for high school students.

2019 **Guest speaker** for HSC seminar series held at the University of Sydney Camden campus and Barker College. Design and delivery of lectures on livestock welfare and pain aligning with the HSC agricultural science curriculum.

October 2018 Interviews and stories on winning research grant featured in *Beef Central*, *Queensland Country Life*, *Farm Online National* and *Ag Trader news articles* – “Australian scientist picks up global animal wellbeing research grant”

1. <https://www.beefcentral.com/news/people-on-the-move-appointments-retirements-achievements-30/>
2. <https://www.queenslandcountrylife.com.au/story/5663182/delivering-pain-relief-through-feed-supplements/>
3. <https://www.farmonline.com.au/story/5658494/aussie-pain-relief-lick-blocks-attract-research-funds/>
4. <https://www.agtrader.com.au/news/livestock-cattle/how-feed-supplements-could-deliver-pain-relief>

2018 Research promoted as a **case study feature** by the *Australian Beef Sustainability Framework*
<https://www.sustainableaustralianbeef.com.au/resources/case-studies/>

ACADEMIC TEACHING

2021 – current **Lecturer** in Animal Welfare Science and Animal Behaviour, The University of Sydney.
 Units of study: ANSC3106, ANSC3106, AVBS3005, AVBS4012, VETS6101, VETS6102, VETS6105, VETS6203, VETS6205, VETS6208, VETS6301, VETS6303, VETS6310.

2021 – Current **Unit of Study co-ordinator** for Understanding Animal Welfare (OLEO1655/OLET1656), The University of Sydney.

2014 - current **Research student supervisor**, The University of Sydney.

2017 – current **Honours thesis assessor**, The University of Sydney.

2018 – current **Academic advisor and assessor** for Research and enquiry (DVM3 R&E), The University of Sydney.

2018 – 2021 **Guest lecturer**, The University of Sydney.
 Units of study: VETS6208, AVBS1002, ANSC3106.

2014 – 2017 **Intercollegiate Meat Judging Competition (ICMJ) coach**, The University of Sydney.