

Virginia (Jennie) Lea Mohler

Education

Fellowship, High Education Academy

2021 University of Sydney Sydney, Australia

PhD, Veterinary Science

2013 University of Sydney Sydney, Australia

MANZCVS, Dairy Cattle Medicine

2010 Australian College of Veterinary Scientists Sydney, Australia

BVSc, Veterinary Science (Honours II)

2005 University of Sydney Sydney, Australia

BSc (Veterinary), Research (Honours I)

2005 University of Sydney Sydney, Australia

BS, Animal Science

1989 University of California, Davis Davis, CA, USA

Laboratory Animal Technologist (LATg) Certification

1990 AALAS Certification Davis, CA, USA

Good Laboratory Practices (GLPs) Certification

1992 GLP Workshop, FDA San Francisco, CA, USA
Training Workshop

Professional experience

January 2023 to present University of Sydney: Livestock Veterinary Services, Camden
Senior Lecturer

- Member of the Doctor of Veterinary Medicine (DVM) curriculum review in the areas of nutrition and welfare. Responsibilities include review of learning outcomes and delivery of content in the curriculum.
- Responsible for coordinating the Large Animal Practice Unit (VETS6310), co-coordinating five professional skills training units of study, and contribute to several units of study as a guest lecturer.
- Clinical teaching of final year veterinary students: This includes on farm training, tutorials, mentoring and preparation of case rounds.
- Primary/Ambulatory Livestock Herd Health and Production Medicine: This includes consultations, management of in-house patients, herd health management, pregnancy diagnosis, developing treatment plans for emergency and critical care patients, management of in-house patients and specialist in-house patients, microbiological culture clinical pathology, imaging and surgery.
- Assist in the development of Standard Operating Procedures and guidelines for clinic operation and conduct of research.
- Research areas of interest include neonate ruminant health and management, infectious diseases, zoonosis, antimicrobial stewardship, antimicrobial resistance, microbiology, large animal surgery and medicine.

January 2022 to present University of Sydney: Veterinary Teaching Hospital, Camden
Clinic Director of Veterinary Services

- Responsible for the day-to-day operation of the University Teaching Hospital, Camden.
- Oversee management of client complaints and customer service.
- Chair, Mortality & Morbidity Committee for the UVTHC. Developed a QR Code reporting system that drives participation and compliance with reporting events.

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experience

November 2014 to December 2022 University of Sydney: Livestock Veterinary Services, Camden

Lecturer

- Development of postgraduate Doctor of Veterinary Medicine (DVM) curriculum in the area of ruminant health and production. This includes delivering lectures and practicals, development of on-line study guides and self-directed learning site.
- Responsible for coordinating two Large Animal Practice Units of study (VETS6304 & VETS6310) and co-coordinating five professional skills training units of study
- Clinical teaching of final year veterinary students: This includes on farm training, tutorials, mentoring and preparation of case rounds.
- Primary/Ambulatory Livestock Herd Health and Production Medicine: This includes consultations, management of in-house patients, herd health management, pregnancy diagnosis, developing treatment plans for emergency and critical care patients, management of in-house patients and specialist in-house patients, microbiological culture clinical pathology, imaging, and surgery.
- Assist in the development of Standard Operating Procedures and guidelines for clinic operation and conduct of research and act as GCP and GLP QA officer.

January 2012 to November 2014 University of Sydney: Livestock Veterinary Services, Camden, NSW

Veterinary Registrar

- Primary/Ambulatory Livestock Herd Health and Production Medicine: This includes consultations, management of in-house patients, herd health management, pregnancy diagnosis, developing treatment plans for emergency and critical care patients, management of in-house patients and specialist in-house patients, microbiological culture clinical pathology, imaging and surgery.
- Clinical teaching of final year veterinary students:
- Assist in the development of Standard Operating Procedures and guidelines for clinic operation and conduct of research. Research coordinator for GCP and GLP studies performed on cattle

March 2006 to January 2012 University of Sydney: Livestock Veterinary Services, Camden, NSW

Postgraduate Veterinary Resident

- Primary/Ambulatory Livestock Herd Health and Production Medicine: This includes consultations, management of in-house patients, herd health management, pregnancy diagnosis, microbiological culture and surgery.
- Postgraduate PhD research in the area of Salmonellosis and Immunology
- Clinical teaching of final year veterinary students: This includes on farm training, tutorials, mentoring and preparation of case rounds.
- Assist in the development of Standard Operating Procedures and guidelines for clinic operation and conduct of research. Evaluate Animal Care and Use Programs following USDA and AAALAC International Guidelines.

March 2007 to present Animal Referral Hospital, Homebush/Baulkham Hills, NSW

Emergency Veterinarian

- Responsible for conducting consults at the emergency after-hour which includes consultations, developing treatment plans for emergency and critical care patients, management of in-house patients and specialist in-house patients, microbiological culture clinical pathology, imaging and surgery.
- Supervision of nursing staff and coordinating patient care plans with senior nursing staff.

FEBRUARY 2000 to present

U.S./Australia

Animal Resource Consultant

- Provide expertise in the areas of laboratory animal care and management. Assist in the development of Standard Operating Procedures and guidelines for conducting research. Evaluate Animal Care and Use Programs following USDA and AAALAC International

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Guidelines. Provide training in laboratory animal research techniques and Food and Drug Administration's Good Laboratory Practices (GLP) regulations.

DECEMBER 2000 to 2006 Aardema Dairies, Inc

Jerome ID, U.S.A

Veterinary Intern/Veterinary Assistant

- Assist veterinary staff with the herd health management of a 26,000 cow dairy. This includes pregnancy diagnosis, assisting transition barn veterinarian in the care and management of fresh cows and heifers and surgical procedures.
- Responsible for developing and standardizing procedures used in all aspects of dairy management and herd health which include employee job descriptions, animal care protocols, treatment protocols, and recordkeeping.

FEBRUARY 2004 to MARCH 2004 Bayer Biotechnology

Berkeley, CA, USA

DECEMBER 2000 to FEBRUARY 2001

Veterinary Research Internship

- Assisted Veterinary Staff by performing daily health checks on rodents and primates housed in the facility.
- Supervised Animal Care Staff in the Pharmacology Department and assisted with implementing quality assurance procedures for animal husbandry.
- Participated in a successful AAALAC International Re-accreditation review and inspection (2001).

JANUARY 2003 to MARCH 2003

Berlex Biosciences

Richmond, CA, USA

DECEMBER 2001 to FEBRUARY 2002

Veterinary Research Assistant Internship

- Assisted research staff in the Department of Pharmacology, Cardiovascular Group
- Assisted in the development of thrombosis models in dogs for use in efficacy models for clot lysing drugs
- Proficient in dose administration, anesthesia, blood collection techniques in dogs

FEBRUARY 2002 to JANUARY 2004 St. Andrew's College

Sydney, Australia

Dean of Students/Resident Mentor

- Provide guidance and academic support to the undergraduate residents at the college.
- Bridge the gap between college administration and students.
- Assisted in the transition from all male college to co-residential.

JUNE 1997 to FEBRUARY 2000 XOMA Limited Berkeley, CA, USA

Animal Resource Manager

- Supervised Research Technicians and Animal Care Staff in the Pharmacology/Toxicology Department. Managed all aspects of a 9000 square foot Biopharmaceutical Animal Research Facility and an annual budget of 500K. Responsible for submitting annual reports to USDA and AAALAC International.
- Participate in USDA, Institutional Animal Care and Use Committee (IACUC) and AAALAC inspections. Monitor the activities of research personnel and ensure that all experimental procedures follow the guidelines set forth by the XOMA IACUC, GLPs, USDA Animal Welfare Act, and AAALAC International; train and educate technical staff in the areas of animal welfare, humane treatment, animal modeling, technician safety and application GLP regulations. Maintained study data in a GLP Archive.
- Co-Chaired the Animal Care and Use Committee. Liaised between Principal Investigators and IACUC during protocol reviews.
- Provided information and resources for the development of new animal models for testing safety and efficacy of XOMA products.
- Performed QA/QC audits on all research data following GLP and GMP standards.
- Prepared Standard Operating Procedures for techniques employed by the department staff
- Facilitated a successful AAALAC International Re-accreditation review and inspection (1998).
- Designed and implemented animal facility reconstruction.

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MARCH 1994 - JUNE 1997 XOMA Limited

Berkeley, CA, USA

Animal Services Supervisor

- Supervised Animal Care Staff in the Pharmacology Department. Managed the daily operations of the Animal Care Facility: animal health monitoring, housing, cleaning, maintenance and inspection of the XOMA Animal Care Facility.
- Maintained USDA, AAALAC and GLP standards.
- Facilitated a successful AAALAC International Re-accreditation review and inspection (1995).

FEB 1990 - MAR 1994 XOMA Corporation

Berkeley, CA, USA

Associate Scientist I - III (Toxicology/Pharmacology)

- Developed and designed models for studying endotoxin shock, bacteremia, DIC, drug clearance and continuous infusion of therapeutic agents in rodents.
- Designed and conducted: toxicology studies, both GLP and non-GLP (includes set-up organization and all technical procedures); pharmacology and efficacy studies (including research on new animal models, surgery and technical procedures); and pharmacokinetic studies. Responsible for data interpretation, report generation and presentation of study results to senior staff.
- Trained technicians to follow GLP regulations, NIH guidelines for animal research and pharmacology/efficacy study procedures.
- Designed and validated a GLP Research Archive for the Department (includes the organization, documentation and maintenance).
- Organized and developed a clinical pathology historical control database on ORICLE; developed ELISAs for research purposes; audited data and reports performed at XOMA or by contract laboratories; coordinated the development of data transfer program for Toxicology software that reduced the man hours to generate a report. Developed, organized and conducted continuous infusion studies in rodents
- Proficient in dose administration (IV, IM, SQ, PO, ID, IC, IT, IP) techniques in rodents, rabbits, dogs, and cats; blood collection; surgical implantation of catheters in rodents and rabbits; necropsy; clinical observations and dose preparation.

Publications

AHC Kung, K. Kong, K. Achilles, **V. Mohler**, and M. White (1994). Continuous Infusion Animal Model for the Immunoconjugate Xoma-Zyme-CD5 Plus in the Rat. *Journal of the American College of Toxicology* **13** (1): 64-75

Mohler, V.L., Heithoff, D.M., Mahan, M.J., Walker, K.H., Hornitzky, M.A., McConnel, C.S., Shum, L.W.C., House, J.K. (2006). Cross-protective immunity in calves conferred by a DNA adenine methylase deficient *Salmonella enterica* serovar Typhimurium vaccine. *Vaccine* **24**: 1339-1345.

Mohler, V.L., Heithoff, D.M., Mahan, M.J., Walker, K.H., Hornitzky, M.A., Shum, L.W.C., Makin, K.J., House, J.K. (2008). Cross-protective Immunity in conferred by a DNA adenine methylase deficient *Salmonella enterica* serovar Typhimurium vaccine in calves challenged with *Salmonella* serovar Newport. *Vaccine* **26**: 1751-1758.

Mohler, V.L. and House, J.K. (2009), 'Salmonellosis in Ruminants', in D.E. Anderson and D.M. Rings (eds.), *Current Veterinary Therapy: Food Animal Practice* (5 edn.; St. Louis: Saunders), 106-11.

Mohler, V.L., Izzo, M.M., House, J.K. (2009). *Salmonella* in Calves. *Veterinary Clinics of North America-Food Animal Practice* **25** (1): 37-54.

Mohler, V.L., Heithoff, D.M., Mahan, M.J., Walker, K.H., Hornitzky, M.A., Gabor, L., Thomson, P.C., Thompson, A., House, J.K. (2011). Protective Immunity Conferred by a DNA Adenine Methylase Deficient *Salmonella enterica* serovar Typhimurium Vaccine When Delivered In-water to Sheep Challenged with *Salmonella enterica* serovar Typhimurium. *Vaccine* **29** (19): 3571-3582.

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Izzo, M.M., Kirkland, P.D., **Mohler, V.L.**, Perkins, N.R., Gunn, A.A. and House, J.K. (2011). Prevalence of major enteric pathogens in Australian dairy calves with diarrhoea. *Australian Veterinary Journal* **89** (5): 167-173

Izzo, M.M., **Mohler, V.L.** and House, J.K. (2011). Antimicrobial susceptibility of *Salmonella* isolates recovered from diarrhoeic calves in Australia. *Australian Veterinary Journal* **89** (5): 402-408.

Mohler, V.L., Heithoff, D.M., Mahan, M.J., Hornitzky, M.A., Thomson, P.C., House, J.K. (2012). Development of a Novel In-Water Vaccination Protocol for DNA Adenine Methylase Deficient *Salmonella enterica* serovar Typhimurium Vaccine in Adult Sheep. *Vaccine* **30** (8): 1481 - 1491.

Burns, H.L., Phillips, P., Hawkes, J., Tang, Y. Y., Grupen, C. G., Mohler, V.L., O'Connell, P. J., Hawthorne, W. J. (2012). *Quantitative Image Analysis of The Distribution of Islets In Pig Pancreata - Westran Vs Outbred Pig*. SM 2012: *The Transplantation Society of Australia and New Zealand Annual Scientific Meeting* 90 (8): Pages A28-A28. Published SEP 2012

Parker, AM, J.K. House, M.S. Hazelton, K.L. Bosward, V.L. Mohler, F.P. Maunsell, and P.A. Sheehy (2016). Milk acidification to control the growth of *Mycoplasma bovis* and *Salmonella* Dublin in contaminated milk. *Journal of Dairy Science* **99** (12): 9875-9884.

Harris, C., V.L. Mohler, P.J. White, and S. Lomax (2020). Electroencephalography can distinguish between pain and anaesthetic intervention in conscious lambs undergoing castration Authors: Electroencephalography Can Distinguish between Pain and Anaesthetic Intervention in Conscious Lambs Undergoing Castration. *Animals* **10** (3), 428

Parker, AM, V.L. Mohler, A.A. Gunn, and J.K. House (2020). Development of a qPCR for the detection and quantification of *Salmonella* spp. in sheep feces and tissues. *Journal of Veterinary Diagnostic Investigation*. **32** (9).

Ranjbar, S., A.R. Rabiee, M.W. Reynolds, V.L. Mohler and J.K. House (2021). Wooden hoof blocks: are we using the right wood? *New Zealand Veterinary Journal* <https://doi.org/10.1080/00480169.2020.1850368>

Abstracts

V.L. Mohler, M. J Mahan, D. M Heithoff, C. McConnel, L. Shum, K. Walker and J.K. House, *Dose Range Finding Study of Salmonella Dublin MN 03-9704 in Six-Week-Old Holstein Calves.*, AVMA Site Visit 2005.

P. Trown, S. Ammons, F. Kohn, J. Chen, L. Chavez, L. Grinna, A Horwitz, W. Leach, C. Mallari, **V. Mohler**, T. Parsons, R. Peterson, G. Theofan, P. Elsbach, J. Weiss, and A.H.C. Kung, *Protection From Lethal Endotoxemia By Treatment With rBPI₂₃, a Recombinant 23 kD LPS-Binding Fragment of Bacteria/Permeability Increasing Protein.*, ICCAC Annual Meeting (Accepted 1993)

V. Mohler, K. Achilles, K. Kong, L. Stricklin, A.H.C. Kung. *Subacute Intravenous Toxicity of Ribosomal Inhibitory Protein, RTA, in Rats*. American College of Toxicology Annual Meeting (Accepted 1993)

K. Achilles, **V. Mohler**, K. Kong, L. Stricklin, A.H.C. Kung. *Subacute Intravenous Toxicity of Recombinant Gelonin in Rats.*, American College of Toxicology Annual Meeting (Accepted 1993)

Academic Awards, Memberships and Committees

Outstanding Teaching award from the Faculty of Science for 2021

Teaching Award for Academic Administration, Sydney School of Veterinary Science for 2019

Animal Ethics Committee Member, Category A, University of Sydney (2019 to present)

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Animal Ethics Committee Member, Category A, Elanco Animal Health (2012 to present)

Versatile Vet (<https://www.versatilevet.com/>) – Contributor/ Presenter

Chair of the Cattle Chapter Examination Committee, Australian & New Zealand College of Veterinary Scientist (2018 to present)

Most Promising Bovine Professional 2005, Australian Association of Cattle Veterinarians

St. Andrew’s College, University of Sydney, Australia (2000 to 2004)

Student Year Representative Veterinary Class, 2000, 2001 and 2003

AVMA Site Visit Steering Committee, 2001-03, University of Sydney, Veterinary Faculty

Teaching and Learning Committee, 2001, University of Sydney, Veterinary Faculty

Alpha Epsilon Phi Sorority (Phi Epsilon Chapter), Sister, 1987 -1989, Rush Chair 1988

Professional memberships

AALAS National Membership, QA/QU Society of America, AAALAC International, Alpha Epsilon Phi Sorority Alumni, Member of the Australian and New Zealand College of Veterinary Scientist in Medicine of Dairy Cattle, Camden Show Society, Fellow in the Higher Education Academy

Hobbies

Quilting, Music/Singing, Football, Baseball/Softball, Cooking, Tae Kwon Do, Reading, Crafting, Writing

References

Upon request