Jennifer van de Ligt, PhD

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Education

Ph.D.	University of Kentucky	Nutrition – Monogastric
M.S.	University of Illinois	Nutrition – Ruminant
B.S.	North Carolina State University	Animal Science (nutrition minor)

Career Progression

University of Minnesota (2016 – present)

Associate Professor Veterinary Population Medicine (2018 – present)

Director Food Protection and Defense Institute (2019 – present)

Director Integrated Food Systems Leadership Program (2018 – present)

Director of Graduate Studies Applied Sciences Leadership (2020 – present)

- Revamped and lead Food Protection and Defense Institute research and outreach programs promoting national health security; food systems, security, and defense; supply chain resilience; and prevention of intentional adulteration of food
- Designed, launched, and lead Integrated Food Systems Leadership Regents Certificate Program and Applied Sciences Leadership Master of Professional Studies to grow leaders to feed the future with a focus on feeding the world sustainably through full utilization of the agricultural toolbox
- Lead cross-functional, multi-collegiate research team investigating transboundary animal disease mitigation through development and application of novel model systems with public-private partnership sponsorship
- Build partnerships with public and private sector stakeholders
- Lead programmatic advisory boards to create and implement strategic plans for research programs and outreach initiatives
- Achieve specific and measurable research and outreach goals, promote research excellence through peer review, utilize financial resources effectively, and set and achieve revenue expectations
- Supervise, mentor, and align talented staff dedicated to improving the food system with an emphasis on national health security, sustainability, and food protection through research, education, and translation to application
- Promote University, College, Department, Program, and Institute at national and international conferences, forums, and meetings

ToxStrategies, Inc. (2018 – present)

Senior Consultant

- Identify and execute food and nutrition regulatory interpretation and strategy, ingredient safety, and new ingredient approval for client products and portfolios

Cargill, Incorporated (1999 – 2016)

Associate Director Scientific and Regulatory Affairs (2012 – 2016)

- Led team that developed extramural safety and efficacy research strategy; created and implemented scientific affairs and advocacy, claims and labeling, and regulatory plans; consulted with regulatory authorities to open markets for new food ingredients
- Directed and mentored technical team, including external consultants, to grow the value of the team as a trusted advisor and essential business partner
- Partnered with federal and international governmental stakeholders, leading science foundations, multi-national food manufacturers, targeted trade associations and external stakeholders to proactively influence public policy, nutrition, and regulatory modernizations
- Updated strategic direction, and negotiated and managed budget for North American Scientific & Regulatory Affairs

Senior Manager Regulatory and Scientific Affairs (2007 – 2012)

- Opened key international markets for Truvia® sweetener products through global collaboration, development of regulatory guidance, scientific substantiation for product claims, and management of regulatory risks.
- Customized regulatory strategy for variety of health, nutrition, and functional human food ingredients through partnership with business leadership, product development, marketing and sales, and legal teams
- Secured funding and initiated multi-year research program to substantiate nutritional and health efficacy of functional ingredient in healthy populations

Intellectual Asset and Innovation Development Manager (1999 – 2007)

- Established intellectual asset management strategy to enhance competitive advantage for global animal nutrition business in collaboration with senior leadership
- Optimized strategic development of branded, novel, and patent-pending ingredients to meet nutritional composition, regulatory compliance, and processing conditions in cross-functional, cross-cultural, and multi-site extramural team environments

Recognition

2021-22 University of Minnesota – University Senate Health Sciences Faculty Consultative Council

2020-24 University of Minnesota – College of Veterinary Medicine Faculty Consultative Council

2020-22	University of Minnesota – Healthy Food Healthy Lives Advisory Board
2020-22	University of Minnesota – Consortium of Law and Values Advisory Board
2018-22	University of Minnesota Toxicology Program – Advisory Board
2016-22	Institute of Food Technologists – Global Food Traceability Center Advisory Board

Publications (select)

Shurson, G. C., Urriola, P. E., & **van de Ligt, J.** (2021). Can we effectively manage parasites, prions, and pathogens in the global feed industry to achieve One Health? Transboundary and emerging diseases, 10.1111/tbed.14205. Advance online publication. https://doi.org/10.1111/tbed.14205.

Shurson, G. C., Palowski, A., **van de Ligt, J.**, Schroeder, D. C., Balestreri, C., Urriola, P. E., & Sampedro, F. (2021). New perspectives for evaluating relative risks of African swine fever virus contamination in global feed ingredient supply chains. Transboundary and emerging diseases, 10.1111/tbed.14174. Advance online publication. https://doi.org/10.1111/tbed.14174.

Fitch, S.E., Payne, L.E., **van de Ligt, J.L.G.**, Doepker, C., Handu, D., Cohen, S.M., Anyangwe, N, and Wikoff, D. (2021). Use of acceptable daily intake (ADI) as a health-based benchmark in nutrition research studies that consider the safety of low-calorie sweeteners (LCS): a systematic map. BMC Public Health 21, 956. https://doi.org/10.1186/s12889-021-10934-2.

van de Ligt, J.L.G., S. J. Borghoff, M. Yoon, L. J. Ferguson, W. DeMaio, and R. H. McClanahan. 2019. Nondetectable or minimal detectable residue levels of N-(n-butyl) thiophosphoric triamide in bovine tissues and milk from a 28-d NBPT dosing study. Trans Anim Sci. 3:4, 1606-1616. https://doi.org/10.1093/tas/txz153

Crincoli, M. C., V. Garcia-Campayo, M. O. Rihner, A. I. Nikiforov, D. Liska, **J.L.G. van de Ligt**. 2016. Evaluation of the gastrointestinal tolerability of corn starch fiber, a novel dietary fiber, in two independent randomized, double-blind, crossover studies in healthy men and women. Intl J Food Sci Nutr. 67:7, 844-56. http://dx.doi.org/10.1080/09637486.2016.1198891

Crincoli, M. C., A. I. Nikiforov, M. O. Rihner, E. A. Lambert, M. A. Greeley, J. Godsey, A. K. Eapen, **J.L.G. van de Ligt**. 2016. A 90-Day Oral (Dietary) Toxicity and Mass Balance Study of Corn Starch Fiber in Sprague Dawley Rats. Food Chem Tox. 97:57. http://dx.doi.org/10.1016/j.fct.2016.08.030

Patent Portfolio (US only issued and applications)

- System and method for optimizing animal production based on environmental nutrient inputs – US7827015
- System and method for optimizing animal production based on empirical feedback – US7904284
- System and method for optimizing animal production – US 2011/0010154, US 2008/0189085

- System and method for optimizing animal production based on dynamic nutrient information – US 2008/0154568, US 2006/0041413
- System and method for optimizing animal production based on empirical feedback – US 2008/0183453, US 2006/0041412
- System and method for optimizing animal production based on a target output characteristic – US 2008/0234995, US 2006/0041419
- System and method for optimizing animal production using genotype information – US 2007/0026493
- System and method for animal production optimization – US 2008/0189085, US 2006/0036419
- Stabilized pancreas product – US7153504
- Mineral feed supplement – US8993038
- High fat/fiber composition – US 2003/0170371
- Reclosable animal feed container – US 2009/0017172
- Solvent extracted corn – US 2008/0118626
- Corn based feed product – US 2007/092821