CURRICULUM VITAE

Josephine Trott

Personal Information

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Education

Education and Training

1992-1995	University of Sydney, Australia, BScAgr(Hons), Agricultural Genetics
1996-1999	University of Melbourne, Australia, PhD, Zoology and Molecular Biology (Kevin R Nicholas, Marilyn Renfree)
1999-2002	National Cancer Institute, USA, Postdoc, Breast cancer
2002-2005	University of Vermont, USA, Postdoc, Mammary gland biology

Employment

Employment History

07/20-present	Department of Animal Science, University of California, Davis, Project Scientist
10/13-06/20	University of California, Davis, Department of Animal Science, Associate Project Scientist
10/13-12/18	University of California, Davis, Internal Medicine: Department of Nephrology, Associate Project Scientist
01/13-10/13	University of California, Davis, Department of Animal Science, Associate Project Scientist
01/08-12/12	Department of Animal Science, University of California, Davis, CA, USA, Assistant Project Scientist
8/05-12/07	Department of Animal Science, University of Vermont, VT, USA, UVM Horse Barn Manager, Teaching assistant and lecturer
8/05-12/07	Department of Animal Science, University of Vermont, VT, USA, Research Associate

1/05-8/05	Department of Animal Science, University of Vermont, VT, USA, Research Associate
1/02-1/05	Department of Animal Science, University of Vermont, VT, USA
10/99-12/01	National Cancer Institute, NIH, Bethesda, MD, USA, Fogarty International Visiting Fellow

Extending Knowledge

Broadcast, Print or Electronic Media

1. Genome-Edited Bull Passes on Hornless Trait to Calves, Newspaper Article, October 7, 2019, UC Davis News.
2. Combination Therapy Inhibits Kidney Tumor Growth in Mice, Magazine Article, April 1, 2020, ASN In The Loop, American Society of Nephrology.

Grants and Contracts

Grants Active

07/01/2020 - 06/30/2025	Grant # 2020-67015-31176, $500,000, Co-Principal Investigator, Secretory activation and lactogenesis - are all cells equal?, Russell Hovey (Principal Investigator), USDA-AFRI, Percentage Effort=30%
02/01/2021 - 01/31/2023	$250,000, Co-Principal Investigator, Does California beef have growth promotant residues and do they pose a breast cancer risk?, Russell Hovey (Principal Investigator), California Breast Cancer Research Program, Percentage Effort=10%

Grants Completed

01/01/2016 - 12/31/2021	$500,000, Co-Principal Investigator, Increasing pork production efficiency through enhanced lactation, Russell Hovey (Principal Investigator), USDA-AFRI, Percentage Effort=40%
07/01/2016 - 05/31/2020	$450,000, Co-Investigator, A Metabolomic Approach to Discovering Markers for ADPKD Progression, Robert H Weiss (Principal Investigator), National Institutes of Health R01
07/01/2017 - 10/31/2018	Grant #C-3999, $97,902, Principal Investigator, DCI Reserve Funds Project, Dialysis Clinic Inc, Percentage Effort=50%
07/01/2015 -	$14,949, Principal Investigator, Combining two immune system

06/30/2017	stimulators as a novel therapy for renal cell carcinoma, UC Davis Academic Federation Committee on Research, Percentage Effort=10%
10/01/2015 - 09/30/2016	$40,000, Co-Investigator, Development of a rhesus monkey model for breast cancer, Russell Hovey (Principal Investigator), UC Davis Comprehensive Cancer Center & College of Agricultural and Environmental Sciences, Percentage Effort=12.5%
07/01/2010 - 6/30/2012	$575,000, Co-Investigator, Breast Cancer Research Program – Idea Expansion Award, Russell Hovey and Robert Cardiff (Principal Investigator), Department of Defense, Percentage Effort=100%
01/01/08 - 01/01/2011	$280,000, Co-Investigator, USDA, Russell Hovey (Principal Investigator), NRI/CGP, Percentage Effort=100%
10/01/05 - 11/30/07	$60,000, Co-Investigator, Hatch, Russell Hovey (Principal Investigator), USDA, Percentage Effort=50%
12/01/03 - 11/30/06	Grant #2004-35206-14140, $60,727, Co-Investigator, Seed Grant, Russell Hovey (Principal Investigator), USDA, Percentage Effort=80%
12/13/02 - 09/30/03	$5,575, Principal Investigator, Mini grant for use of facilities, Vermont Genetics Network, Percentage Effort=10%

Honors & Awards

2022	Academic Federation Research Travel Award Program to attend the Gordon Research Conference in Mammary Gland Biology
2021	Academic Federation Research Travel Award Program to attend the online FASEB Growth Hormone/Prolactin Family in Biology and Disease conference
2017-2018	Academic Federation Research Travel Award Program to attend the FASEB Growth Hormone/Prolactin Family in Biology and Disease conference
2017	Outstanding poster award at the Internal Medicine Kidney Research Day, March 9
2017	Outstanding Poster award at the Internal Medicine Research Social on February 8
2016	Outstanding poster award at the Internal Medicine Kidney Research Day on March 17
2015	Best poster award at the Internal Medicine 1st Annual Liver Research Day on October 14
2011	Academic Federation Research Travel Award to participate in the 2011 ADSA-ASAS Joint Annual Meeting
2002	Travel Award to participate in the 11th International Conference of the International Society for Research in Human Milk and Lactation
2001	Young Australian of the Year 2001: national finalist in Science and Technology section.
2001	Young Australian of the Year 2001:NSW Science and Technology section.

2000	Young Australian of the Year 2000: runner-up NSW Science and Technology section
1999-2002	Fogarty International Visiting Fellowship, NIH Visiting Program
1997	Drummond Travel Award to attend overseas conferences from the Department of Zoology, Melbourne University
1995	Winner of University of Sydney Convocation Medal, to top graduate of 1995
1995	Department of Natural Resources and Environment: Nancy Millis Research Award
1995	Wesfarmers-Dalgety National Scholarship in Agriculture.
1995	Sydney University: Faculty of Agriculture Dean's List
1995	Sydney University: National Farmers Federation Prize for honors at graduation
1995	University Medallist and First Class Honours for BScAgr
1995	The Womens College at Sydney University: Janet Elspeth Crawford Prize
1995	The Womens College scholarship
1995	Peter Nivison Essay Competition: Winner
1994	Sydney University: Faculty of Agriculture Dean's List
1994	Sydney University: Millicent Lillian Christian Prize for academic achievement
1994	The Womens College scholarship
1994	Sydney Chinese Association Prize in Microbiology
1994	Clifford Dawson Holliday Prize for Third Year Agriculture.
1994	Golden Jubilee Scholarship in Agricultural Science
1993	Sydney University: Faculty of Agriculture Dean's List
1993	The Womens College at Sydney University: Rennie Prize for academic achievement
1993	Golden Key National Honor Society member
1993	The Womens College scholarship
1993	Sydney University: Sir Robert Watt Memorial Prize for Crop Sciences
1993	Sydney University: Belmore Scholarship for Second Year

Publications

Journals

1997	Campbell PM, Trott JF, Claudianos C, Smyth KA, Russell RJ, Oakeshott JG. Biochemistry of esterases associated with organophosphate resistance in Lucilia cuprina with comparisons to putative orthologues in other Diptera. *Biochem Genet*, 35(1-2): 17-40.
1997	Nicholas K, Simpson K, Wilson M, Trott J, Shaw D. The tammar wallaby: a model to study putative autocrine-induced changes in milk composition. *J Mammary Gland Biol Neoplasia*, 2(3): 299-310.
2001	Hovey RC, Trott JF, Ginsburg E, Goldhar A, Sasaki MM, Fountain SJ, Sundararajan K, Vonderhaar BK. Transcriptional and spatiotemporal regulation of prolactin receptor mRNA and cooperativity with progesterone receptor function during ductal branch growth in the mammary gland. *Dev Dyn*, 222(2): 192-205.

2001 Nicholas KR, Fisher JA, Muths E, Trott J, Janssens PA, Reich C, Shaw DC. Secretion of whey acidic protein and cystatin is down regulated at mid-lactation in the red kangaroo (Macropus rufus). *Comp Biochem Physiol A Mol Integr Physiol*, 129(4): 851-8.

2002 Hovey RC, Trott JF, Vonderhaar BK. Establishing a framework for the functional mammary gland: from endocrinology to morphology. *J Mammary Gland Biol Neoplasia*, 7(1): 17-38.

2002 Trott JF, Wilson MJ, Hovey RC, Shaw DC, Nicholas KR. Expression of novel lipocalin-like milk protein gene is developmentally-regulated during lactation in the tammar wallaby, Macropus eugenii. *Gene*, 283(1-2): 287-97.

2003 Trott JF, Hovey RC, Koduri S, Vonderhaar BK. Alternative splicing to exon 11 of human prolactin receptor gene results in multiple isoforms including a secreted prolactin-binding protein. *J Mol Endocrinol*, 30(1): 31-47.

2003 Trott JF, Simpson KJ, Moyle RL, Hearn CM, Shaw G, Nicholas KR, Renfree MB. Maternal regulation of milk composition, milk production, and pouch young development during lactation in the tammar wallaby (Macropus eugenii). *Biol Reprod*, 68(3): 929-36.

2004 Greene, E. and Trott, J. F. The Self-Guided Horse Facility Analysis: A Proactive Safety Education Tool for Equine Facilities. *Journal of Extension*, 42(6).

2004 Hovey RC, Trott JF. Morphogenesis of mammary gland development. *Adv Exp Med Biol*, 554: 219-28.

2004 Trott JF, Hovey RC, Koduri S, Vonderhaar BK. Multiple new isoforms of the human prolactin receptor gene. *Adv Exp Med Biol*, 554: 495-9.

2005 Goldhar AS, Vonderhaar BK, Trott JF, Hovey RC. Prolactin-induced expression of vascular endothelial growth factor via Egr-1. *Mol Cell Endocrinol*, 232(1-2): 9-19.

2005 Trott JF, Adams TE, Wilson M, Nicholas KR. Positive and negative regulatory elements in the late lactation protein-A gene promoter from the tammar wallaby (Macropus eugenii). *Biochim Biophys Acta*, 1728(1-2): 65-76.

2007 Trott JF, Farley NR, Taatjes DJ, Hovey RC. Cloning and functional characterization of allelic variation in the porcine prolactin receptor. *Domest Anim Endocrinol*, 33(3): 313-34.

2008 Morabito JE, Trott JF, Korz DM, Fairfield HE, Buck SH, Hovey RC. A 5' distal palindrome within the mouse mammary tumor virus-long terminal repeat recruits a mammary gland-specific complex and is required for a synergistic response to progesterone plus prolactin. *J Mol Endocrinol*, 41(2): 75-90.

2008 Trott JF, Vonderhaar BK, Hovey RC. Historical perspectives of prolactin and growth hormone as mammogens, lactogens and galactagogues--agog for the future! *J Mammary Gland Biol Neoplasia*, 13(1): 3-11.

2009 Trott JF, Horigan KC, Gloviczki JM, Costa KM, Freking BA, Farmer C, Hayashi K, Spencer T, Morabito JE, Hovey RC. Tissue-specific regulation of porcine prolactin receptor expression by estrogen, progesterone, and prolactin. *J Endocrinol*, 202(1): 153-66.

2009 Horigan, KC, Trott, JF, Barndollar, AS, Scudder, JM, Blauwiekel, RM,

Hovey, RC. Hormone interactions confer specific proliferative and histomorphogenic responses in the porcine mammary gland. *Domest Anim Endocrinol*, 37(2): 124-38.

2011 Trott, JF, Schennink, A, Hovey, RC. Cloning and expression of a unique short form of the porcine prolactin receptor. *J Mol Endocrinol*, 46(1): 51-62.

2012 Trott, JF, Schennink, A, Petrie, WK, Manjarin, R, VanKlompenberg, MK, Hovey, RC. Triennial Lactation Symposium: Prolactin: The multifaceted potentiator of mammary growth and function. *J Anim Sci*, 90(5): 1674-86.

2012 Berryhill, G.E., Gloviczki, J.M., Trott, J.F., Aimo, L., Kraft, J., Cardiff, R.D., Paul, C.T., Petrie, W.K., Lock, A.L. and Hovey, R.C. Diet-induced metabolic change induces estrogen-independent allometric mammary growth. *Proceedings of the National Academy of Sciences*, 109(40): 16294-16299.

2013 Schennink, A., Trott, J.F., Freking, B.A. and Hovey, R.C. A novel first exon directs hormone-sensitive transcription of the pig prolactin receptor. *Journal of Molecular Endocrinology*, 51(1): 1-13.

2013 M.K. VanKlompenberg, R. Manjarin, J.F. Trott, H.F. McMicking, and R.C. Hovey. Late-gestational hyperprolactinemia accelerates mammary epithelial cell differentiation and leads to increased milk yield. *Journal of Animal Science*, 91(3): 1102-1111.

2014 Trott, J.F., Freking, B.A. and Hovey, R.C. Variation in the coding and 3' untranslated regions of the porcine prolactin receptor short form modifies protein expression and function. *Animal Genetics*, 45: 74-86.

2015 Schennink, A., Trott, J.F., Berryhill, G., Donovan, C., Manjarin, R., VanKlompenberg, M., Rowson-Hodel, A.R., Luis, M-Y. O., and Hovey, R.C. Alcohol intake stimulates epithelial proliferation in an authentic model of the human breast. *Reproductive Toxicology*, 54: 93-100.

2015 Schennink, A., Trott, J. F., Manjarin, R., Lemay, D. G., Freking, B.A. and Hovey, R.C. Comparative genomics reveals tissue-specific regulation of prolactin receptor gene expression. *Journal of Molecular Endocrinology*, 54(1): 1-15.

2015 Wettersten, H.I., Hakimi A.A., Morin, D., Bianchi, C., Johnstone, M.E., Donohoe, D.R., Trott, J.F., Abu Aboud, O., Stirdivant, S., Neri, B., Wolfert, R., Stewart, B., Perego, R., Hsieh J.J, Weiss, R.H. Grade-dependent metabolic reprogramming in kidney cancer revealed by combined proteomics and metabolomics analysis. *Cancer Research*, 75(12): 2541-52.

2015 Jane Q Chen; Hidetoshi Mori; Robert D Cardiff; Josephine F Trott; Russell C Hovey; Neil Hubbard; Jesse A Engelberg; Clifford G Tepper; Brandon Willis; Imran H Khan; Resmi Ravindran; Szeman R Chan; Robert D Schreiber; Alexander D Borowsky. Abnormal Mammary Development in 129:STAT1-null Mice is Stroma-Dependent. *PLoS One*, 10(6): e0129895.

2015 Rowson-Hodel, A.R., Manjarin, R., Trott, J.F., Cardiff, R.D., Borowsky, A.D. and Hovey, R.C. Neoplastic transformation of porcine mammary epithelial cells in vitro and tumor formation in vivo. *BMC Cancer*, 15: 562.

2016 Berryhill, GE, Trott, JF, Hovey, RC. Mammary gland development-It's not just about estrogen. *Journal of Dairy Science*, 99(1): 875-83.

2016 VanKlompenberg, MK, Manjarín, R, Donovan, CE, Trott, JF, Hovey, RC. Regulation and localization of vascular endothelial growth factor within the mammary glands during the transition from late gestation to lactation. *Domestic Animal Endocrinology*, 54: 37-47.

2016 Josephine F. Trott, Jeffrey Kim, Omran Abu Aboud, Hiromi Wettersten, Benjamin Stewart, Grace Berryhill, Francisco Uzal, Russell C. Hovey, Ching-Hsien Chen, Katie Anderson, Ashley Graef, Aaron L Sarver, Jaime F. Modiano, and Robert H. Weiss. Inhibiting tryptophan metabolism enhances interferon therapy in kidney cancer. *Oncotarget*, 7(41): 66540-66557.

2017 Ching-Hsien Chen, Lon Wolf R. Fong, Eric Yu, Reen Wu, Josephine F. Trott and Robert H. Weiss . Up-regulation of MARCKS in Kidney Cancer and its Potential as Therapeutic Target. *Oncogene*, 36(25): 3588-3598.

2017 G.E. Berryhill, S. Miszewski, J.F. Trott, J. Kraft, A.L. Lock, and R.C. Hovey. Estrogen-independent mammary gland growth stimulated by trans fats is fatty acid type and isomer specific. *Lipids*, 52(3): 223-233.

2017 Abu Aboud, O, Habib, SL, Trott, J, Stewart, B, Liang, S, Chaudhari, AJ, Sutcliffe, J, Weiss, RH. Glutamine Addiction in Kidney Cancer Suppresses Oxidative Stress and Can Be Exploited for Real-Time Imaging. *Cancer Research*, 77(23): 6746-6758.

2017 Berryhill, GE, Trott, JF, Derpinghaus, AL, Hovey, RC. TRIENNIAL LACTATION SYMPOSIUM/BOLFA: Dietary regulation of allometric ductal growth in the mammary glands. *Journal of Animal Science*, 95(12): 5664-5674.

2017 Vicki J. Hwang, Xia Zhou, Xiaonan Chen, Josephine Trott, Omran Abu Aboud, Kyuhwan Shim, Lai Kuan Dionne, William Senapedis, Erkan Baloglu, Moe R. Mahjoub, Xiaogang Li, and Robert H. Weiss . Anti-cystogenic activity of a small molecule PAK4 inhibitor as a novel treatment for ADPKD. *Kidney International*, 92(4): 922-933.

2017 Grace E Berryhill, Danielle G Lemay, Josephine F Trott, Lucila Aimo, Adam L Lock, Russell C Hovey. The Transcriptome of Estrogen-Independent Mammary Growth in Female Mice Reveals That Not All Mammary Glands Are Created Equally. *Endocrinology*, 158(10): 3126–3139.

2017 Mori H, Chen JQ, Cardiff RD, Pénzváltó Z, Hubbard NE, Schuetter L, Hovey RC, Trott JF, Borowsky AD. Pathobiology of the 129:Stat1 -/- mouse model of human age-related ER-positive breast cancer with an immune infiltrate-excluded phenotype. *Breast Cancer Research*, 19(1): 102.

2018 Trott, J.F., Hwang, V.J., Ishimaru, T., Chmiel, K., Zhou, X., Shim, K., Stewart, B., Mahjoub, M.R., Jen, K.Y., Barupal, D., Li, X., Weiss, R.H. Arginine reprogramming in ADPKD results in arginine-dependent cystogenesis. *American Journal of Physiology. Renal Physiology*, 315(6): F1855–F1868.

2019 Kim, K, Trott, JF, Gao, G, Chapman, A, Weiss, RH. Plasma metabolites and lipids associate with kidney function and kidney volume in

hypertensive ADPKD patients early in the disease course. *BMC Nephrology*, 20(1): 66.

2020 Rosita R. Asawa, Carina Danchik, Alexey Zahkarov, Yuchi Chen, Ty Voss, Ajit Jadhav, Darren P. Wallace, Josephine F. Trott, Robert H. Weiss, Anton Simeonov, and Natalia J. Martinez. A high-throughput screening platform for Polycystic Kidney Disease (PKD) drug repurposing utilizing murine and human ADPKD cells. *Scientific Reports*, 10: 4203.

2020 Amy E. Young, Tamer A. Mansour, Bret R. McNabb, Joseph R. Owen, Josephine F. Trott, C. Titus Brown, Alison L. Van Eenennaam. Genomic and phenotypic analyses of six offspring of a genome-edited hornless bull. *Nature Biotechnology*, 38: 225–232.

2020 Josephine F. Trott, Omran Abu Aboud, Bridget McLaughlin, Katie L. Anderson, Jaime F. Modiano, Kyoungmi Kim, Kuang-Yu Jen, William Senapedis, Hua Chang, Yosef Landesman, Erkan Baloglu, Roberto Pili, and Robert H. Weiss. Anti-Cancer Activity of PAK4/NAMPT Inhibitor and Programmed Cell Death Protein-1 Antibody in Kidney Cancer. *Kidney360*, 1(5): 376-388.

2020 Susan G. Miszewski, Josephine F. Trott, Grace E. Berryhill, Lyvin Tat, Ralph Green, Alexander D. Borowsky, Joshua W. Miller, and Russell C. Hovey. Folate deficiency inhibits development of the mammary gland and its associated lymphatics in FVB mice. *Journal of Nutrition*, 150(8): 2120-2130.

2021 Mathews, A.T., Banks, C.M, Trott, J.F., Saniz, R.D., Farmer, C., Pendergast, I.I. and Hovey, R.C. Metoclopramide induces preparturient, low-level hyperprolactinemia to increase milk production in primiparous sows. *Domestic Animal Endocrinology*, 74: 1006517.

2021 Alison L. Van Eenennaam, Felipe De Figueiredo Silva, Josephine F. Trott, David Zilberman. Genetic Engineering of Livestock: The Opportunity Cost of Regulatory Delay. *Annual Review of Animal Biosciences*, 9: 1.

2021 G.E. Berryhill, J.M. Gloviczki, J.F. Trott, J. Kraft, A.L. Lock, and R.C. Hovey. In utero exposure to trans-10, cis-12 conjugated linoleic acid modifies postnatal development of the mammary gland and its hormone responsiveness. *Journal of Mammary Gland Biology and Neoplasia*, 26: 263-276.

2021 Joseph R. Owen, Sadie L. Hennig, Bret R. McNabb, Tamer A. Mansour, Justin M. Smith, Jason C. Lin, Amy E. Young, Josephine F. Trott, James D. Murray, Mary E. Delany, Pablo J. Ross, and Alison L. Van Eenennaam. One-step generation of a targeted knock-in calf using the CRISPR-Cas9 system in bovine zygotes. *BMC Genomics*, 22: 118.

2022 Josephine F. Trott, Anke Schennink, Katherine C. Horigan, Danielle Lemay, Julia R. Cohen, Thomas R. Famula, Julie A. Dragon and Russell C. Hovey. Unique transcriptomic changes underlie hormonal interactions during mammary histomorphogenesis in female pigs. Endocrinology, 163: 1-27.

Limited Distribution

2003 Trott, J. F. Putting Educational Materials to the Test with a Barn Safety Evaluation. *American Medical Equestrian Association/Safe Riders Foundation*, XV(1): 4-5.

2010 Platz, C., Bean, H. and Trott, J. F. Equine frog treatment studies. *The Horse's Hoof*, 41: 17-21.

2021 David Zilberman, Alison L. Van Eenennaam, Felipe De Figueiredo Silva, and Josephine F. Trott. The Costs of Overregulating Animal and Plant Biotechnology: Lessons from COVID-19. *ARE Update*, 24(4): 1-4.

Featured Publications

Wang, M. Arginine auxotrophy in PKD. Nature Reviews Nephrology Research Highlights **14**, 721 (2018). https://www.nature.com/articles/s41581-018-0076-5.

Based on the original article by Trott, J. F. et al. 2018 Arginine reprogramming in ADPKD results in arginine-dependent cystogenesis in Am. J. Physiol. Renal Physiol. https://doi.org/10.1152/ajprenal.00025.2018

Editorial: Course correction, Nature Biotechnology 38, 113. https://www.nature.com/articles/s41587-020-0433-3

Comment on the original article by Young et al. 2020. Genomic and phenotypic analyses of six offspring of a genome-edited hornless bull. Nature Biotechnology 38, pp. 225-232. https://www.nature.com/articles/s41587-019-0266-0

Presentations

2002 Trott, J. F., Hovey, R. C., Koduri, S., Ginsburg, E. and Vonderhaar, B. K. Expression of two novel prolactin receptor isoforms in human breast and colon cancer, Poster presentation at the Mammary Gland Biology Gordon Research Conference, Lucca, Italy.

2002 Trott, J. F., Hovey, R. C., Koduri, S. and Vonderhaar, B. K. Alternative splicing to exon 11 of human prolactin receptor gene results in multiple isoforms including a secreted prolactin binding protein, Poster presented at the 11th International Conference of the International Society for Research in Human Milk and Lactation.

2005 Trott, J.F., Barndollar, A.S., Scudder, J.M., Horigan, K.C. and Hovey, R.C. An alternative, authentic model of normal breast development and breast cancer, Poster presented at the Department of Defense Era of Hope Breast Cancer Research Program, Philadelphia.

2008 Trott, J.F., Gloviczki, J.M., Freking, B., Farmer, C., Spencer, T., Horigan, K., and Hovey, R.C. Allelic variation in the porcine PRLR gene and its endocrinological regulation in swine, Gordon Conference on Prolactin and Growth Hormone, Ventura, CA.

2008 Horigan, K.C., Trott, J.F., Barndollar, A., James, S.J., Cupicha, L.,

	Blauwiekel, R.M., and Hovey, R.C. Hormonal regulation of the porcine mammary gland as a model for understanding human breast development, 2nd Annual Breast Cancer Research Symposium, Sacramento, CA.
2009	Schennink, A., Trott, J. F., Bond, J. P., Famula, T. R. and Hovey, R. C. Functional genomics of mammary gland growth in a unique pig model of breast development, Pig Genome III Conference, Hinxton, UK.
2010	Berryhill, G. E., Gloviczki, J. M., Kraft, J., Lock, A. L., Trott J. F. and Hovey, R. C. Conjugated linoleic acid isomers and their effects on mammary gland development in mice, 7th International Symposium on Milk Genomics and Human Health, Davis, USA.
2010	Rowson-Baldwin, A.R., Trott, J.F., Cardiff, R.D. and Hovey, R.C. Viral Transformation of Pig Mammary Epithelial Cells (pMEC) in vitro and in vivo: A Novel Model for the Study of Human Breast Cancers, 16th Annual Cancer Research Symposium, University of California Davis Cancer Center, Sacramento, CA.
2010	Schennink, A., Trott, J. F., Bond, J. P., Famula, T. R. and Hovey, R. C. Functional genomics of mammary gland growth and lactogenesis in a unique pig model, 7th International Symposium on Milk Genomics and Human Health, Davis, USA.
2011	Berryhill, G. E., Gloviczki, J. M., Trott J. F., Petrie, W. K., Lock, A. L., Kraft, J. and Hovey, R. C. Effects of in utero exposure to dietary conjugated linoleic acid on mammary gland development in Balb/cJ mice, 8th International Symposium on Milk Genomics and Human Health, Melbourne, VIC, Australia.
2011	Schennink, A., Trott, J. F., Bond, J. P., Famula, T. R. and Hovey, R. C. Functional genomics of mammary gland development in a unique animal model, Gordon Research Conference on Mammary Gland Biology, Newport RI, USA.
2011	Berryhill, G. E., Gloviczki, J. M., Kraft, J., Lock, A. L., Trott J. F., Petrie, W. K. and Hovey, R. C. Effect of conjugated linoleic acid on mammary gland development in Balb/cJ mice, Interdisciplinary Graduate and Professional Symposium, University of California Davis, Davis, CA.
2011	Rowson-Baldwin, A.R., Trott, J.F., Cardiff, R.D. and Hovey, R.C. Viral Transformation of Pig Mammary Epithelial Cells (pMEC) in vitro and in vivo: A Novel Model for the Study of Human Breast Cancers, Presentation at first annual Interdisciplinary Graduate and Professional Symposium, University of California Davis, Davis, CA.
2011	July 10, Identification of a short isoform of the porcine prolactin receptor and its variants. Trott, J.F., Schennink, A., and Hovey, R.C., Oral presentation at the Joint annual meeting of the ASAS-ADSA, New Orleans, LA.
2014	June, Hovey, R.C., Trott, J.F., Schennink, A., Rowson-Hodel, A., Manjarin, R., VanKlompenberg, M., Berryhill, G., Donovan, C., Luis, M-Y. O., Freking, B., Cardiff, R. and Borowsky, A., Oral presentation given to the 2014 Mammary Gland Gordon Research Conference, Il Ciocco, Italy.

2014	November 20, Alcohol intake stimulates epithelial proliferation in pig mammary glands, a model of the human breast. A. Schennink, J. F. Trott, G. E. Berryhill, C. E. Donovan, R. Manjarin, M. K. VanKlompenberg, A. R. Rowson-Hodel, M.-Y. Osorio Luis and R.C. Hovey, Poster presented at the Breast Cancer and the Environment Research Program, San Francisco.
2015	October 14, Combined metabolomics and proteomics to uncover metabolic reprogramming in kidney cancer: Similar techniques can be applied to liver disease. Josephine F Trott, Omran Abu Aboud, Hiromi I Wettersten and Robert H Weiss, Poster presented at the 1st Annual Internal Medicine Liver Research Day, UC Davis.
2015	October 29, Josephine F Trott, Omran Abu Aboud, Hiromi I Wettersten and Robert H Weiss, Combined metabolomics and proteomics to uncover metabolic reprogramming in kidney cancer: Similar techniques can be applied to liver disease, Poster presentation given at 21st Annual Cancer Research Symposium, UC Davis Comprehensive Cancer Center.
2016	March 17, Combined metabolomics and proteomics to uncover metabolic reprogramming in kidney cancer: Similar techniques can be applied to liver disease. Josephine F Trott, Omran Abu Aboud, Hiromi I Wettersten and Robert H Weiss, Poster presented at the 1st Annual Internal Medicine Kidney Research Day, UC Davis.
2016	April 16, Combination therapy of immune checkpoint and nuclear exporter inhibitors in a renal cell carcinoma mouse model. Josephine Trott, Katie L. Anderson, Jeffrey Kim, Ashley J. Graef, Sharon Shacham, Yosef Landesman, Aaron L. Sarver, Jaime F. Modiano and Robert H. Weiss, Poster presentation at American Association for Cancer Research 107th Annual Meeting..
2017	February 8, Anti-cystogenic activity of a small molecule PAK4 inhibitor as a novel treatment for ADPKD. Josephine Trott, Vicki J. Hwang, Xia Zhou, Xiaonan Chen, Omran Abu Aboud1, Kyuhwan Shim, Lai Kuan Dionne, William Senapedis, Erkan Baloglu, Moe R. Mahjoub, Xiaogang Li, and Robert H. Weiss, Poster presented at the Internal Medicine Research Social, UC Davis.
2017	March 9, Anti-cystogenic activity of a small molecule PAK4 inhibitor as a novel treatment for ADPKD. Josephine Trott, Vicki J. Hwang, Xia Zhou, Xiaonan Chen, Omran Abu Aboud, Kyuhwan Shim, Lai Kuan Dionne, William Senapedis, Erkan Baloglu, Moe R. Mahjoub, Xiaogang Li, and Robert H. Weiss, Poster presented at the 2nd Annual Internal Medicine Kidney Research Day, UC Davis.
2017	July 24, Interaction between estrogen and prolactin stimulates mammary gland proliferation and gene expression in a unique animal model. Josephine Trott, Anke Schennink, Katherine C. Horigan, Danielle Lemay, Caroline Tautz, Jonathan Lawson, Jeffrey Bond, Thomas Famula and Russell Hovey, Poster presented at the FASEB SRC “Growth Hormone/ Prolactin Family in Biology and Disease”.
2018	May 30, Interaction between estrogen and prolactin stimulates mammary gland proliferation and gene expression in a unique animal model. Trott, J.F., Schennink, A., Horigan, K.C., Lemay, D., Tautz, C.,

Bond, J., Famula, T., and Hovey, R.C., Poster presented at the Mammary Gland Biology Gordon Research Conference, Il Ciocco, Italy.

2019 June, Mathews, A.T., Banks, C., Trott, J.F., Lemay, D.G., Kebreab, E., Sainz, R.D., Farmer, C. and Hovey, R.C., Poster presentation at 2019 Gordon Conference on Mammary Gland Biology, Newry, Maine.

2021 March 2, Glucocorticoid regulation of milk production and α-lactalbumin gene expression. Anna Sadovnikova, Alice T Mathews, Josephine F Trott, Sergio C Garcia and Russell C Hovey, Annual poster day hosted by the School of Medicine at UC Davis.

2021 May 19, Increased pork production efficiency through manipulation and understanding of the actions of prolactin, Invited speaker and Poster presenter at The Growth Hormone (GH)/Prolactin (PRL) Family in Biology and Disease Online Conference.

Service

Committees

Department/Section

2008 to 2022 Animal Science Picnic Day Committee.

2008 to 2022 Federation Merit Review Committee.

Professional Service

2020-2022

Ad hoc reviewer for The Informed Arizona Equestrian Horse Health Series, Journal of Pharmacy and Pharmacology, Acta Pharmaceutica Sinica B, BMC Genomics, General and Comparative Endocrinology, Scientific Reports, Frontiers in Cell and Developmental Biology section Molecular Medicine.

2019

Made weekly posts on the Society for Mammary Gland Biologist's Facebook Page about current research in the field of Mammary Gland Biology, as a member of the Hovey Lab

2017-2019

Ad hoc review of manuscripts for Journal of Animal Science, Endocrinology, Reproduction Fertility and Development (x2) and Journal of Mammary Gland Biology and Neoplasia

2018

Made weekly posts on the Society for Mammary Gland Biologist's Facebook Page about recently published research in the field of Mammary Gland Biology, as a member of the Hovey Lab

2017

1 July - 31 December, made weekly posts about recently published research on the Society for Mammary Gland Biologists Facebook Page, as a member of the Hovey Lab

2015-2016

Ad hoc review of manuscripts for Gene, BMC Genomics, Journal of Mammary Gland Biology and Neoplasia, International Journal of Genetics and Molecular Biology, International Journal of Molecular Sciences, and SpringerPlus

2014

Reviewer for General and Comparative Endocrinology, Gene, Journal of Mammary Gland Biology and Neoplasia.

2012

Reviewer for Biochemistry, Journal of Dairy Science, Endocrinology.

2011

Reviewer for FEBS Letters, Endocrinology, Journal of Dairy Science

2010

Reviewer for Journal of Dairy Science

2009

Reviewer for Journal of Dairy Science, International Journal of Genetics and Molecular Biology

2008

Reviewer for Endocrinology, Journal of Endocrinology, Journal of Dairy Science

2002-2007

Ad Hoc review of manuscripts for Biochemistry, Breast Cancer Research and Treatment, Journal of Mammary Gland Biology and Neoplasia, Journal of Dairy Research, Australian Journal of Zoology, American Medical Equestrian Association News, Biochimica et Biophysica Acta, Comparative Biochemistry and Physiology

University Service

2008-2019

Painted the musculature of a live horse as a Picnic Day exhibit.

2008-2010

Volunteer worker at CAES graduation ceremony

2019

Organized the Animal Biotechnology demonstration booth at Picnic Day where we had the polled heifer offspring of a genome edited bull and her horned aunt on display

External Thesis Review

2015

Acted as a reserve examiner for a PhD thesis submitted to the University of Melbourne

2009

Reviewed a PhD thesis submitted to the Department of Zoology at the University of Melbourne, Victoria, Australia.

Courses

2005	Fall Semester, ASCI 115, ASCI 119, ASCI 0F98B, ASCI 198G/H/I/JH, ASCI 098C/D and ASCI 198 E/F, Undergraduate Count=0, Graduate Count=0, Percentage Effort=100
2006	Spring Semester, ASCI 121, ASCI 205, ASCI 098B, ASCI 198G/H/I/J, ASCI 098C/D and ASCI 198E/F,, Undergraduate Count=0, Graduate Count=0, Percentage Effort=100
2006	Fall Semester, ASCI 115, ASCI 119, ASCI 0F98B, ASCI 198G/H/I/JH, ASCI 098C/D and ASCI 198 E/F, Undergraduate Count=0, Graduate Count=0, Percentage Effort=100
2007	Spring Semester, ASCI 121, ASCI 205, ASCI 098B, ASCI 198G/H/I/J, ASCI 098C/D and ASCI 198E/F, Undergraduate Count=0, Graduate Count=0, Percentage Effort=100
2007	Fall Semester, ASCI 115, ASCI 119, ASCI 0F98B, ASCI 198G/H/I/JH, ASCI 098C/D and ASCI 198 E/F, Undergraduate Count=0, Graduate Count=0, Percentage Effort=100%

Lecture/Seminar/Lab/Other (by term)

2008	Winter Quarter

	Lecture: ANS 124: Marsupial lactation, 1 hours
2009	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2010	Winter Quarter
	Lecture: Lecture: ANS 124: Marsupial lactation, 1 hours
2010	Summer Session 1
	Lecture: ANS127: Advanced Reproductive Technologies, 1.5 hours
2010	Summer Session 1
	Lecture: ANS127: Foal care, 1.5 hours
2010	Summer Session 1
	Other: Proctoring final exam, 1 hours
2011	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2012	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2013	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2014	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2015	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2016	Winter Quarter
	Lecture: ANS 124: Marsupial lactation, 1 hours
2017	Winter Quarter
	Lecture: ANS 124: Marsupial Lactation, 1 hours
2018	Winter Quarter
	Lecture: ANS 124: Marsupial Lactation, 1 hours
2019	Winter Quarter
	Lecture: ANS 124: Marsupial Lactation, 1 hours
2020	Winter Quarter
	Lecture: ANS124: Marsupial lactation, 1 hours
2021	Winter Quarter

Lecture: ANS124: Marsupial lactation, 1 hours

Teaching: Additional Information

Laboratory research students

01/08 - 2022: Supervision and education of undergraduate, graduate research students and postdoctoral fellows in the laboratory