CURRICULUM VITAE Päivi Johanna Rajala-Schultz

Education / Academic qualifications

2008	Diplomate of A	American	College of	Veterinary	Preventive	Medicine
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- 2004 Docent in veterinary epidemiology, University of Helsinki, Finland
- 1998 PhD (veterinary epidemiology), College of Veterinary Medicine, Cornell University, Ithaca, NY. Dissertation title: "Effect of diseases on milk production and culling of dairy cows"
- 1989 DVM, College of Veterinary Medicine, Helsinki, Finland



Employment history

Professor in milk hygiene and cattle health	Sept. 2015 -
University of Helsinki, Finland	
Professor	2013 -2015
College of Veterinary Medicine, The Ohio State University (OSU)	
Associate Professor	2005 - 2013
College of Veterinary Medicine, OSU	
Assistant Professor	1999 - 2005
College of Veterinary Medicine, OSU	
Research Scientist	1998 - 1999
College of Veterinary Medicine, Cornell University	
Graduate Student	1994-1998
College of Veterinary Medicine, Cornell University	
Project Researcher	1989-1994
College of Veterinary Medicine, Helsinki, Finland	
Veterinary Practitioner	1988-1994

Professional Memberships

Society of Veterinary Epidemiology and Preventive Medicine (SVEPM), 2016-

European Mastitis Research Workers Group, 2016-

National Mastitis Council (NMC) - member of International Advisory Committee 2005-2010,

Program committee for 2010 meeting, Research Committee 2012-present

Conference of Research Workers on Animal Diseases, member, 2003 - present

American Dairy Science Association

Association of Veterinary Epidemiology and Preventive Medicine (AVEPM), director 2007-2008 Central Ohio Veterinary Medical Association, Vice President 2003, President 2004-2005 Finnish Veterinary Association, 1989-present

Professional services

The Finnish Association for Milk Hygiene, Chair of the Board of Directors, 2016-

Panel member and reviewer for FORMAS, Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, 2016-

Panel member and reviewer for United Stated Department of Agriculture-Agricultural Research Services, National Program (USDA-ARS) 2016 Reviewer for Journal of Dairy Science, Journal of Dairy Research, Animal Reproduction Science, Preventive Veterinary Medicine, Veterinary Microbiology, Theriogenology, Zoonosis and Public Health, JAVMA, American Journal of Veterinary Research, Foodborne Pathogens and Disease, Veterinary Research Communications, Veterinary Ophthalmology, Animal: An International Journal of Animal Bioscience, Finnish Veterinary Journal, Irish Journal of Agricultural and Food Research

External examiner in PhD dissertation defenses at The Norwegian School of Veterinary Medicine, Norway, University of Guelph, Canada, The Royal Veterinary and Agricultural University, Denmark, University of Helsinki, Finland, and University of Prince Edward Island, Canada, University of British Columbia, Canada

External evaluator of PhD dissertations and docentships at the Faculty of Veterinary Medicine in University of Helsinki, Finland

Coordinator of the AVEPM (Association of Veterinary Epidemiology and Preventive Medicine) Graduate Student Competition at the CRWAD (Conference for Research Workers of Animal Diseases) meetings in 2013-2015.

Member of the editorial board of Veterinary Ophthalmology – statistical consult, 2010-present Poster and oral presentation judge at AVEPM graduate student competition at Conference for Research Workers of Animal Diseases, 2006-2015

Member of scientific review board for the International Symposium on Veterinary Epidemiology and Economics (ISVEE) meetings, 2009, 2015

Ad-hoc reviewer for USDA CSREES grant applications (Animal Protection program)

Panel member for USDA SBIR grant program, 2005

Central Ohio Veterinary Medical Association, President, 2004 – 2005

OSU, Ohio State Teaching Enhancement Program, Steering Committee, Member, 2004 - 2008

OSU College of Veterinary Medicine, Council for Graduate Studies, Chair, 2012-2014

OSU College of Veterinary Medicine, Council for Graduate Studies, Member, 2008-2015

OSU College of Veterinary Medicine, Council for Research, Member, 2000-2004, 2007-2009

OSU College of Veterinary Medicine, Curriculum Committee, Member, 2006 – 2009

OSU College of Veterinary Medicine, Electives Committee, Member, 2007 – 2015

OSU College of Veterinary Medicine, Financial/Budget Committee, Member, 2014 – 2015

OSU College of Veterinary Medicine, Veterinary Public Health Advisory Committee, 2005-2015

OSU College of Veterinary Medicine, Poster judge at the Advances in Veterinary Medicine Day (the College "Annual Research Day"), 2005-2015

OSU Dept. of Veterinary Preventive Medicine, Graduate Studies Committee, chair, 2005-2008

Teaching Experience

Experience in teaching of professional and graduate students at university level since 1998: lectures, seminars, practicals. Lecturer, leader and coordinator of courses on veterinary preventive medicine, dairy herd health, milk production and udder health, epidemiology & statistics, critical reading of scientific literature, scientific presentations/seminars.

Active involvement in graduate student education

Lectures in continuing education courses for veterinarians, milk producers and other professionals

Research

With background as a practicing veterinarian and graduate training in epidemiology, most of my research is applied field research, with special interest in dairy production medicine. Overall goal of the research has been and is to identify and develop management practices that

will improve dairy cattle health and well-being and enhance sustainability and profitability of dairy industry. Current research interests are especially in udder health and milk quality, with particular focus in dry cow management and dry cow treatments and epidemiology of *Staphylococcus aureus* mastitis.

Selected topics of research project as the lead investigator and project manager

- Dry cow treatments and drying-off practices several larger and smaller projects mounting to \$1.000.000+ of funding
- Epidemiology of *Staphylococcus aureus* mastitis in dairy herds several smaller projects with combined funding of over \$110.000
- Reproductive management in dairy herds several smaller projects with combined funding of approx. \$30.000

Co-investigator and collaborator in numerous research projects (providing expertise in study design and biostatistics) dealing with, among other things, reproductive performance of dairy cows, infectious diseases in calves, Salmonella and antimicrobial resistance in swine production, dermatological, ophthalmological and orthopedic issues in dogs and equines.

Publications in peer-reviewed scientific journals (selected)

- Björkman S, Oliviero C, **Rajala-Schultz PJ**, Soede NM, Peltoniemi OA 2017: The effect of litter size, parity and farrowing duration on placenta expulsion and retention in sows. <u>Theriogenology.</u> 92:36-44.
- Fullagar BA, **Rajala-Schultz** P, Hettlich BF, 2017: Comparison of complication rates of unilateral, staged bilateral, and single-session bilateral surgery for the treatment of bilateral medial patellar luxation in dogs. Can Vet J., 58, 39-44
- Gott, PN, **Rajala-Schultz**, **PJ**, Schuenemann, GM, Proudfoot, KL, Hogan JS 2016: Effect of gradual or abrupt cessation of milking at dry-off on milk yield and somatic cell score in the subsequent lactation J. Dairy Sci. 100:2080-2089.
- Gott, PN, **Rajala-Schultz**, **PJ**, Schuenemann, GM, Proudfoot, KL, Hogan JS 2016: Intramammary infections and milk leakage following gradual or abrupt cessation milking. J. Dairy Sci. 99, 4005-17.
- da Costa, LB, **Rajala-Schultz**, **PJ**, Schuenemann, GM 2016: Management practices associated with presence of Staphylococcus aureus in bulk tank milk from Ohio dairy herds. J. Dairy Sci. 99, 1364-73.
- Artuso-Ponte V, Moeller S, **Rajala-Schultz P,** Medardus JJ, Munyalo J, Lim K, Gebreyes WA. 2015. Supplementation with Quaternary Benzo(c)phenanthridine Alkaloids Decreased Salivary Cortisol and Salmonella Shedding in Pigs After Transportation to the Slaughterhouse. Foodborne Pathog Dis.11, 891-7
- Hnot, M, Cole, L, Lorch, G, Papich, M, **Rajala-Schultz, P**, Daniels, J 2015: Evaluation of canine-specific minocycline and doxycycline susceptibility breakpoints for meticillin-resistant *Staphylococcus pseudintermedius* isolates from dogs. Vet Dermatol. 26,5, 334-8
- Titler M, Maquivar MG, Bas S, **Rajala-Schultz** PJ, Gordon E, McCullough K, Federico P, Schuenemann GM. 2015. Prediction of parturition in Holstein dairy cattle using electronic data loggers. J Dairy Sci. 98, 8, 5304-12.
- Gemensky-Metzler AJ, Sheahan JE, **Rajala-Schultz PJ**, Wilkie DA, Harrington J, 2014: Retrospective study of the prevalence of keratoconjunctivitis sicca in diabetic and nondiabetic dogs after phacoemulsification. **Vet Ophthalmol**. 18(6),472-80

- Hinds CA, Niehaus AJ, Premanandan C, **Rajala-Schultz PJ**, Rings DM, Lakritz J. 2014: Characterization of the contributions of Hp-MMP 9 to the serum acute phase protein response of lipopolysaccharide challenged calves. BMC Vet Res. 10(1):261.
- Da Costa, L, **Rajala-Schultz**, **PJ**, Hoet, AE, Seo, KS, Fogt, K, Moon, BS 2014: Genetic relatedness and virulence factors of bovine Staphylococcus aureus isolated from teat skin and milk. J. Dairy Sci. 97:6907-16.
- Medardus, JJ, Molla, BZ, Nicol, M, Morrow, WM, **Rajala-Schultz, PJ**, Kazwala, R, Gebreyes, WA, 2014: In-feed use of heavy metal micronutrients in U.S. swine production systems and its role in persistence of multidrug resistant Salmonella. Appl. Envir. Microbiol (AEM), 2014, 80, 2317-25.
- Sarjokari, K, Kaustell, KO, Hurme, T, Kivinen, T, Peltoniemi, OAT, Saloniemi, H, **Rajala-Schultz**, **PJ**, 2013: Prevalence and Risk Factors for Lameness in Insulated Free Stall Barns in Finland. Livestock Sci. 156, 44-52
- Walker, JB, Walker, WL, DeGraves, FJ, Mathews, JL, Gebreyes, WA, **Rajala-Schultz**, **PJ**, 2013. Shedding Patterns of Staphylococcus aureus in naturally occurring intramammary infections sampled weekly throughout lactation. JAVMA, May 15, 242:1410-8
- Gray LL, Hillier A, Cole LK, **Rajala-Schultz PJ**, 2013: The effect of ketoconazole on whole blood and skin cyclosporin concentrations in dogs. Vet Dermatol. 2013, 1, 118-28
- Brick TA, Schuenemann GM, Bas S, Daniels JB, Pinto CR, Rings DM, **Rajala-Schultz PJ**. 2012: Effect of intrauterine dextrose or antibiotic therapy on reproductive performance of lactating dairy cows diagnosed with clinical endometritis. J Dairy Sci.95, 1894-905
- Walker WL, Epperson WB, Wittum TE, Lord LK, **Rajala-Schultz** PJ, Lakritz J. 2012: Characteristics of dairy calf ranches: Morbidity, mortality, antibiotic use practices, and biosecurity and biocontainment practices. J Dairy Sci. 95, 2204-14.
- **Rajala-Schultz, PJ,** AH Torres, and FJ DeGraves, 2011: Milk yield and somatic cell count during the following lactation after selective treatment of cows at dry-off. J Dairy Res, 78, 489-99.
- Walker JB, **Rajala-Schultz PJ**, Walker WL, Mathews JL, Gebreyes WA, DeGraves FJ, 2011: Variation in daily shedding patterns of *Staphylococcus aureus* in naturally occurring intramammary, JVDI 23, 1114-1122.
- Bas S, Hoet AE, **Rajala-Schultz**, **PJ** Sanders D and Schuenemann GM, 2011: The use of plastic cover sheaths at the time of artificial insemination improved fertility of lactating dairy cows. J Dairy Sci, 94, 793-9.
- Schuenemann GM, Eastridge ML, Weiss WP, Workman JD, Bas S, **Rajala-Schultz P.** 2011: Dairy nutrition management: Assessing a comprehensive continuing education program for veterinary practitioners. J Dairy Sci. 94, 2648-56.
- Bannikov GA, Hinds CA, **Rajala-Schultz PJ**, Premanandan C, Rings DM, Lakritz J. 2011: Serum haptoglobin-matrix metalloproteinase 9 (Hp-MMP 9) complex as systemic inflammation in cattle. Vet Immunol Immunopathol. 139(1):41-9.
- Schuenemann GM, Bas S, Workman JD, **Rajala-Schultz PJ.** 2010: Dairy Reproductive management: assessing a comprehensive continuing education program for veterinary practitioners. J Vet Med Educ. 37(3):289-98
- Tadesse DA, Bahnson PB, Funk JA, Thakur S, Morrow WE, Wittum T, Degraves F, **Rajala-Schultz P**, Gebreyes WA. 2011: Prevalence and Antimicrobial Resistance Profile of *Campylobacter* Spp. Isolated from Conventional and Antimicrobial-Free Swine Production Systems from Different U.S. Regions. Foodborne Pathog Dis. 3, 267-74
- Molla B, Sterman A, Mathews J, Artuso-Ponte V, Abley M, Farmer W, Rajala-Schultz P,

- Morrow WE, Gebreyes WA. 2010: *Salmonella enterica* in commercial swine feed and subsequent isolation of phenotypically and genotypically related strains from fecal samples. Appl Environ Microbiol. 76(21):7188-93.
- Walker, JB, **Rajala-Schultz P.J.**, DeGraves F.J 2010: The effect of inoculum volume on the microbiological detection of naturally occurring *Staphylococcus aureus* intramammary infections. J. Vet. Diag. Invest. 22(5):720-4.
- Newman K.A., **Rajala-Schultz P.J.**, DeGraves F.J., Lakritz J 2010: Association of milk yield and infection status at dry-off with intramammary infections at subsequent calving. J. Dairy Res. 77, 99-106.
- Newman KA, **Rajala-Schultz PJ**, Lakritz J, Degraves FJ 2009: Lactoferrin concentrations in bovine milk prior to dry-off. J Dairy Res. 76, 426-32.
- Torres AH., **Rajala-Schultz**, **PJ**, DeGraves FJ, 2009: Diagnosis of bovine intramammary infections based on sampling strategy, epidemiology of pathogens and agreement beyond chance. J. Vet. Diag. Invest. 21, 4, 427-36
- **Rajala-Schultz PJ**, Torres AH, DeGraves JF, Gebreyes WA, Patchanee P 2009: Antimicrobial resistance and strain persistence of coagulase-negative staphylococci over the dry period. Vet. Micro. 134: 55-64
- LeJeune J., **Rajala-Schultz**, **PJ** 2009: Unpasteurized Milk: A Continued Public Health Threat. Clin. Inf. Dis., 48(1):93-100.
- Ishihara A, Reed SM, **Rajala-Schultz PJ**, Robertson J T, Bertone AL. 2009: Kinetic gait analysis for the detection, quantification, and differentiation of hindlimb lameness and spinal ataxia in horses: 36 cases (2004-2007). JAVMA, 234, 5, 644-51.
- Pozzi A, Hildreth BE, **Rajala-Schultz PJ** 2008: Comparison of arthroscopy and arthrotomy for diagnosis of medial meniscal pathology: an ex vivo study. Vet Surg. 37(8):749-55.
- Hoet AE, Caswell RJ, DeGraves FJ, **Rajala-Schultz PJ**, Gebreyes WA, Saville WJ, Wittum TE 2008: A new approach to teaching veterinary public health at the Ohio State University. J. Vet. Med. Educ., 35(2):160-5
- Torres AH, **Rajala-Schultz**, **PJ**, DeGraves FJ, Hoblet KH, 2008: Using dairy herd improvement records and clinical mastitis history to identify subclinical mastitis infections at dry-off. J. Dairy Res. 75, 240-7.
- Meadows C, **Rajala-Schultz PJ**, Frazer GS, Meiring RW, Hoblet KH, 2008: Evaluation of a Contract Breeding Management Program in Selected Ohio Dairy Herds. Test day summary measures and economic measures. Anim. Repro. Sci. 104, 189-200.
- Funk JA, Wittum TE, LeJeune JT, **Rajala-Schultz PJ**, Bowman A, Mack A, 2007: Evaluation of stocking density and subtherapeutic chlortetracycline on *Salmonella enterica* subsp. enterica shedding in growing swine. Vet. Micro. Vet Micro., 124(3-4):202-8.
- Pinchbeck LR, Cole LK, Hillier A, Kowalski JJ, **Rajala-Schultz PJ**, Bannerman TL, York S, 2007: Pulsed-field gel electrophoresis patterns and antimicrobial susceptibility phenotypes for coagulase-positive staphylococcal isolates from pustules and carriage sites in dogs with superficial bacterial folliculitis. Am. J. Vet. Res., 68, 535-42
- Meadows, C, **Rajala-Schultz PJ**, Frazer GS, Phillips G, Meiring RW, Hoblet KH, 2007: Evaluation of a Contract Breeding Management Program in Selected Ohio Dairy Herds with Event-Time Analysis: II. Parametric frailty models. Prev. Vet. Med., 80, 89-102
- Torres A, **Rajala-Schultz PJ**, Silveira F, DeGraves F. 2006: Udder Health and Selective Dry Cow Therapy. Proceedings of the 11th symposium of International Society for Veterinary Epidemiology and Economics, Cairns, Australia, August 2006, 222
- Meadows C, Rajala-Schultz PJ, Frazer GS, Meiring RW, Hoblet KH, 2006: Evaluation of a

- Contract Breeding Management Program in Selected Ohio Dairy Herds with Event-Time Analysis: I. Cox Proportional Hazards Models. Prev. Vet. Med., 77, 145-160.
- Tragesser LA, Wittum TE, Funk JA, Winokur PL, **Rajala-Schultz PJ**, 2006: Ceftiofur and its association with the recovery of fecal *Escherichia coli* with reduced susceptibility of ceftriaxone in dairy cattle. Am. J. Vet. Res. 67,10, 1696-1700.
- Funk JA, LeJeune JT, **Rajala-Schultz PJ**, Wittum TE, 2006. The effect of subtherapeutic chlortetracycline on the fecal flora of swine. Microbl Drug Resist. 12,3, 210-218.
- Pinchbeck LR, Cole LK, Hillier A, Kowalski JJ, **Rajala-Schultz PJ**, Bannerman TL, York S 2006: Genotypic relatedness of staphylococcal strains isolated from pustules and carriage sites in individual dogs with superficial bacterial folliculitis. Am. J. Vet. Res., 67, 8,1337-46.
- Meadows C, **Rajala-Schultz**, **PJ**, Frazer GS, 2005: A Spreadsheet-based model demonstrating the non-uniform economic effects of changing reproductive performance in Ohio dairy herds. J. Dairy Sci., 88, 1244-1254.
- **Rajala-Schultz PJ,** Smith KL, Hogan JS, 2005: Association between milk yield at dry-off and probability of intramammary infections at calving. J. Dairy Sci., 88, 577-579
- **Rajala-Schultz PJ,** Smith KL, Hogan JS, Love BC, 2004: Antimicrobial susceptibility of mastitis pathogens isolated from first lactation and older cows. Vet. Micro, 102:33-42.
- **Rajala-Schultz PJ,** Frazer GS, 2003: Reproductive performance in Ohio dairy herds in the 1990's. Animal Reprod. Sci. 76, 127-142.
- **Rajala-Schultz PJ**, Saville WJA, 2003: Sources of variation in milk urea nitrogen in Ohio dairy herds. J. Dairy Sci. 85, 1653-1661.
- Gröhn YT, **Rajala-Schultz PJ**, Allore HG, DeLorenzo MA, Hertl JA, Galligan DT, 2003: Optimizing Replacement of Dairy Cows: Modeling the Effects of Diseases. Vet. Prev. Med., 61, 27-43.
- **Rajala-Schultz PJ**., Gröhn YT, 2001: Comparison of economically optimized culling recommendations and actual culling of Finnish Ayrshire cows. Prev. Vet. Med. 49, 1-2, 29-39.
- **Rajala-Schultz PJ,** Saville WJA, Frazer GS, Wittum TE, 2001: Association between milk urea nitrogen and fertility in Ohio dairy cows. J. Dairy Sci. 84,482-489.
- Gröhn YT, **Rajala-Schultz PJ**, 2000: Epidemiology of reproductive performance in dairy cows. Anim. Reprod. Sci. 60-61, 605-614.
- **Rajala-Schultz PJ**, Gröhn YT, Allore HG, 2000: Optimizing replacement decisions for Finnish dairy herds. Acta Vet. Scand. 41,199-212.
- **Rajala-Schultz PJ**, Gröhn YT, Allore HG, 2000: Optimizing breeding decisions for Finnish dairy herds:. Acta Vet. Scand., 41,213-226.
- **Rajala-Schultz PJ**, Gröhn, YT McCulloch, C. E. 1999. Effects of milk fever, ketosis and lameness on milk yield in dairy cows. J. Dairy Sci. 82:288-294.
- **Rajala-Schultz PJ**, Gröhn YT, McCulloch, C. E. and Guard, C. L. 1999. Effects of clinical mastitis on milk yield in dairy cows. J. Dairy Sci. 82:1213-1220.
- **Rajala-Schultz PJ**, Gröhn YT, 1999: Culling of dairy cows. Part I. Effects of diseases on culling in Finnish Ayrshire cows. Prev. Vet. Med. 41, 195-208.
- **Rajala-Schultz PJ**, Gröhn YT, 1999: Culling of dairy cows. Part II. Effects of diseases and reproductive performance on culling in Finnish Ayrshire cows. Prev. Vet. Med. 41, 279-294
- **Rajala-Schultz PJ**, Gröhn YT, 1999: Culling of dairy cows. Part III. Effects of diseases, pregnancy status and milk yield on culling in Finnish Ayrshire cows. Prev. Vet. Med. 41, 295-309.

- **Rajala PJ**, Gröhn YT, 1998. Disease occurrence and risk factor analysis in Finnish Ayrshire cows. Acta Vet. Scand. 39, 1-13.
- **Rajala PJ**, Gröhn YT, 1998. Effects of dystocia, retained placenta and metritis on milk yield of dairy cows. J. Dairy Sci. 81:3172-3191.
- **Rajala P**, Castren H. 1995. Serum Immunoglobulin Concentration and Health of Dairy Calves in Two Different Management Systems to 12 Weeks of Age, J. Dairy Sci. 78,2737-2744.

Proceedings/Abstracts (selected)

- **Rajala-Schultz, PJ** 2016: Lypsykarjojen umpeenpanohoidot ja umpeenpanokäytännöt. Eläinlääkäripäivät Luentokokoelma 2016, 230-35
- **Rajala-Schultz, PJ,** Gott, P.N, G.M. Schuenemann, K.L. Proudfoot, J.S. Hogan, 2016: Dairy cow activity around dry-off following abrupt and gradual cessation of milking European Mastitis Research Workers meeting, Nov. 3-4, 2016, Stourport on Severn, The United Kingdom
- **Rajala-Schultz, PJ**, Gott, P.N, G.M. Schuenemann, K.L. Proudfoot, J.S. Hogan, 2016: Effect of gradual or abrupt cessation of milking at dry-off on milk yield and somatic cell score in the subsequent lactation. 6th International Dairy Federation Mastitis Conference, Sept 7-9, 2016 in Nantes, France.
- **Rajala-Schultz, PJ**, McCullough, KE, Gott, PN, Schuenemann, GM 2015: Dairy cow activity as a potential management tool for detection of clinical mastitis. International Society of Veterinary Epidemiology and Economics, ISVEE 14, November 3-7, 2015 in Merida, Yucatan, Mexico.
- Gott, PN, **Rajala-Schultz**, **PJ**, Schuenemann, GM 2015: Effect of cow and quarter level factors at dry-off on intramammary infection status at calving. ISVEE 14, November 3-7, 2015 in Merida, Yucatan, Mexico.
- Gott, PN, **Rajala-Schultz**, **PJ**, Schuenemann, GM, Hogan, JS 2015: Milk yield at dry-off and other factors impacting risk of intramammary infections at calving. Joint Annual Meeting of ADSA-ASAS, July 12-16, Orlando, FL.
- Gott, PN, **Rajala-Schultz, PJ**, Schuenemann, GM 2015: Association between milk cessation method and daily milk yield around dry-off on intramammary infection status at calving. Proceedings of NMC 54th Annual Meeting, Memphis, TN, February 1-3, 2015.
- McCullough, KE, **Rajala-Schultz**, **PJ**, Gott PN, 2014: Behavior in Dairy Cows With Low and High Somatic Cell Counts. Proceedings of NMC 53rd Annual Meeting, Dallas-Fort Worth, Jan 26-28, 2014.
- Gott, PN, **Rajala-Schultz**, **PJ**, Schuenemann, GM 2014: Impact of milk cessation method and daily milk yield around dry-off on intramammary infection status at calving. Proceedings of NMC 53rd Annual Meeting, Dallas-Fort Worth, Jan 26-28, 2014
- **Rajala-Schultz, PJ**, Torres, AH, 2013. Does every cow need antibiotic treatment at dry-off? ADSA-ASAS Annual Meeting, July 8-12, Indianapolis, IN, Abstract 420.
- **Rajala-Schultz, PJ**, McCullough, KE, ML, Gott, PN, Schueneman, GM, Titler, M 2013: Cow activity around diagnosis of naturally occurring clinical mastitis, ADSA-ASAS Annual Meeting, July 8-12, Indianapolis, IN, Abstract 62.
- **Rajala-Schultz, PJ**, da Costa, L, Schuenemann, GM, DeGraves, FJ 2013. Drying-off practices and *S. aureus* prevalence in Ohio dairies. Proceedings of the 29th NKVet Symposium: Mastitis –new knowledge on diagnostics and control on modern dairy farms, 13-14th May

- 2013, Reykjavik, Iceland, p.30
- McCullough, KE, **Rajala-Schultz**, **PJ**, Schueneman, GM, Titler, ML, Gott, PN 2013: Dairy Cow Behavior as a Method of Early Mastitis Detection. Proceedings of NMC 52nd Annual Meeting, San Diego, Jan 27-29, 2013.
- **Rajala-Schultz, PJ** 2012: Does pasteurization help or harm milk as food: the arguments pro and con. AVMA convention, San Diego 2012
- da Costa, L, **Rajala–Schultz**, **PJ**, Hoet, A., Van Balen, J, Schuenemann, G, 2012. Methicillin Resistant Staphlylococcus aureus in Dairy Farms Is there a need to worry? Proceeding of the 2012 CRWAD (Conference of Research Workers in Animal Diseases) meeting, Chicago, December 8-10, 2012, abstract 43.
- da Costa, LC, **Rajala-Schultz**, **PJ**, Hoet, Am Van Balen, J, Schuenemann, GM, 2012. Screening Bulk Tank Milk for Methicillin Resistant *Staphlylococcus aureus* in Ohio Dairy Farms. International Society of Veterinary Epidemiology and Economics, ISVEE 13, August 19-24, Maastricht, The Netherlands, p. 61.
- **Rajala-Schultz, PJ**, DeGraves, FJ, 2012. Is routine antibiotic treatment at dry-off necessary to maintain good udder health? International Society of Veterinary Epidemiology and Economics, ISVEE 13 August 19-24, Maastricht, The Netherlands, p.127.
- da Costa, L, **Rajala-Schultz PJ**, 2012. Genotypic Variation of *Staphylococcus aureus* in Dairy Cattle. Proceedings of the National Mastitis Council 51st Annual Meeting, St Pete Beach, FL, Jan. 22-24, 2012.
- Wagner, A, **Rajala-Schultz**, **PJ**, da Costa, L. 2011. A comparison of inoculum volumes for detecting *Staphylococcus aureus* from bovine milk. Proc of 3rd International Symposium on mastitis and milk quality. Sept 22-24, 2011, St. Louis, MO.
- **Rajala-Schultz, PJ**, da Costa, L, Schuenemann, GM, DeGraves, FJ, 2011. Drying-off practices and *Staphylococcus aureus* prevalence in Ohio dairies. Proc. of 3rd International Symposium on Mastitis and Milk Quality. Sept 22-24, 2011, St. Louis, MO.
- da Costa L **Rajala-Schultz PJ**, 2011. Management practices and prevalence of *Staphylococcus aureus* in bulk tank milk in Ohio dairies. Proc of 3rd International Symposium on Mastitis and Milk Quality, Sept 22-24, 2011, St. Louis, MO.
- **Rajala-Schultz PJ**, Holland, S, Walker JB, Matthews J, DeGraves FJ, Gebreyes WA, Hogan JS, da Costa L, 2010: Cross-sectional sampling of dairy heifers and cows to assess genotypic diversity of *Staphylococcus aureus* in a dairy herd. The 5th IDF (International Dairy Federation) Mastitis Conference, 21-24 March 2010, Christchurch, New Zealand, pp. 220-223
- Torres, A.H., **Rajala-Schultz, P.J.** 2010: Selective dry cow therapy and somatic cell count on the subsequent lactation. The 5th IDF (International Dairy Federation) Mastitis Conference, 21-24 March 2010, Christchurch, New Zealand, p. 734
- Walker, J.B., **Rajala-Schultz, P.J.**, DeGraves, F.J. 2010: Variation in daily shedding pattern of *Staphylococcus aureus* in naturally occurring intramammary infections. NMC 49th Annual Meeting Proceedings, Jan 31- Feb 3, 2010, Albuquerque, New Mexico, p.200-201
- Walker, J.B., **Rajala-Schultz, P.J.**, DeGraves, F.J. 2010: The effects of inoculum volume and extended sampling on the microbiological detection of naturally occurring *Staphylococcus aureus* intramammary infections. NMC 49th Annual Meeting Proceedings, Jan.31- feb3, 2010, Albuquerque, New Mexico, p.230-231.

- Walker, J.B., **Rajala-Schultz, P.J.**, DeGraves, F.J. 2010: Variation in daily shedding pattern of *Staphylococcus aureus* and somatic cell counts in naturally occurring intramammary infections. The 5th IDF (International Dairy Federation) Mastitis Conference, 21-24 March 2010, Christchurch, New Zealand, pp. 408-412.
- Walker, J.B., **Rajala-Schultz, P.J.**, Mathews, J.L., Gebreyes, W.A. DeGraves, F.J. 2010 Shedding of *Staphylococcus aureus* in naturally occurring intramammary infections monitored weekly throughout the lactation. The 5th IDF Mastitis Conference, 21-24 March 2010, Christchurch, New Zealand, p. 695.
- **Rajala-Schultz, P.J.**, Holland,S., Walker, J.B., DeGraves, F.J., Hoet, A.E., F.J., Gebreyes, W.A. 2009: Epidemiology of *Staphylococcus aureus* in dairy heifers. International Society for Veterinary Epidemiology and Economics, ISVEE12, Durban, South Africa, August, 2009, 507
- Walker, J.B., **Rajala-Schultz, P.J.**, DeGraves, F.J. 2009: "The Effect of Strain Differences on Cure-Rates of Naturally Occurring *Staphylococcus aureus* Intramammary Infections. International Society for Veterinary Epidemiology and Economics, ISVEE 12, Durban, South Africa, August 2009, 147
- **Rajala-Schultz, P.J** 2009: The raw milk controversy. Midwest Veterinary Conference, Feb. 19, 2009, Columbus, OH
- **Rajala-Schultz, P.J** 2009: To drink or not to drink: debate about raw milk. SAVMA Symposium, March 27, Columbus, OH
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