

**NMC 46<sup>th</sup> Annual Meeting**  
**January 20-23, 2008**  
**New Orleans, Louisiana**

**Titles of Posters to be Presented at the Technology Transfer Session**

1. The Role of Subclinical Mastitis Across the Dry Period in Development of Clinical Mastitis in Early Lactation  
*Jose C. F. Pantoja, Carol Hulland, Pamela Ruegg, University of Wisconsin, Madison, Wisconsin, USA*
2. Clinical Mastitis and Selective Dry Cow Therapy  
*Audrey Torres<sup>1,2</sup>, Päivi Rajala-Schultz<sup>1</sup>, Fernando Silveira<sup>1</sup>, Fred DeGraves<sup>1</sup>, <sup>1</sup>The Ohio State University, Columbus, Ohio, USA, <sup>2</sup>Department of Animal Production, Universidad Centroccidental "Lisandro Alvarado," Barquisimeto, Lara, Venezuela*
3. Comparison of 3M<sup>TM</sup> Petrifilm<sup>TM</sup> Staph Express Count Plates, 3M<sup>TM</sup> Petrifilm<sup>TM</sup> Rapid Coliform Count Plates, and 3M<sup>TM</sup> Petrifilm<sup>TM</sup> Aerobic Count Plate with Standard Bacteriology of Bovine Milk  
*J. Wallace<sup>1,2</sup>, J-P. Roy<sup>1</sup>, É. Bouchard<sup>1</sup>, L. DesCôteaux<sup>1</sup>, S. Messier<sup>1</sup>, D. DuTremblay<sup>1</sup>, <sup>1</sup>Faculté de Médecine Vétérinaire, Université de Montréal, St.-Hyacinthe, Québec, Canada, <sup>2</sup> Ormstown Veterinary Clinic, Ormstown, Québec, Canada*
4. Effect of Using an On-Farm Culture Based Treatment System on Antibiotic Use and Bacteriological Cure for Clinical Mastitis  
*Alfonso Lago<sup>1</sup>, Sandra Godden<sup>1</sup>, Russ Bey<sup>1</sup>, Pamela Ruegg<sup>2</sup>, Ken Leslie<sup>3</sup>, Randy Dingwell<sup>3</sup>, <sup>1</sup>University of Minnesota, St. Paul, Minnesota, USA, <sup>2</sup>University of Wisconsin, Madison, Wisconsin, USA, <sup>3</sup>University of Guelph, Guelph, Ontario, Canada*
5. Metabolites and Immune Parameters Associated with Somatic Cell Count in Early Lactation  
*A-K. Nyman<sup>1,2</sup>, U. Emanuelson<sup>3</sup>, K. Holtenius<sup>3</sup>, K. L. Ingvarsen<sup>4</sup>, T. Larsen<sup>4</sup>, K. Persson Waller<sup>1,3</sup>, <sup>1</sup>National Veterinary Institute, <sup>2</sup>Swedish Dairy Association, <sup>3</sup>Swedish University of Agricultural Sciences, <sup>4</sup>Aarhus University, <sup>1,2,3</sup>Uppsala, Sweden, <sup>4</sup>Tjele, Denmark*
6. Economic Impact of Milk Loss Due to New Subclinical Mastitis Cases in Dutch Dairies Estimated Using a Test-Day Model  
*T. Halasa, M. Nielen, H. Hogeveen, Utrecht University, Utrecht, The Netherlands*
7. Prevalence of Contagious Mastitis Pathogens on U.S. Dairy Operations  
*Jason Lombard<sup>1</sup>, Tonya Van Slyke<sup>2</sup>, Frank Welcome<sup>2</sup>, Ynte Schukken<sup>2</sup>, Christine Kopral<sup>1</sup>, <sup>1</sup>USDA:APHIS:VS: Centers for Epidemiology and Animal Health, Fort Collins, Colorado, USA, <sup>2</sup>Quality Milk Production Services, Ithaca, New York, USA*
8. Association Between CNS-Infections at Calving and First Lactation Milk Production and Somatic Cell Counts in Dairy Heifers  
*S. Piepers<sup>1</sup>, H.W. Barkema<sup>2</sup>, A. de Kruif<sup>1</sup>, G. Opsomer<sup>1</sup>, S. De Vliegher<sup>1</sup>, <sup>1</sup>University of Ghent, Belgium, <sup>2</sup>University of Calgary, Canada*
9. Gene Expression Networks In Bovine Mammary Tissue During a *Streptococcus uberis* Intramammary Infection Challenge  
*Kasey M. Moyes, J.K. Drackley, M. Bionaz, D.E. Morin, S.L. Rodriguez-Zas, R.E. Everts, H.A. Lewin and J.J. Loor, University of Illinois, Urbana, Illinois, USA*
10. Mastitis Control: Seize the Opportunity – The Role of Veterinarians as Effective Udder Health Advisors  
*Jolanda Jansen<sup>1</sup>, Theo JGM Lam<sup>2,3</sup>, Reint Jan Renes<sup>1</sup>, <sup>1</sup>Wageningen University, Wageningen, The Netherlands, <sup>2</sup> Dutch Udder Health Centre UGCN, Deventer, The Netherlands, <sup>3</sup> GD Animal Health Service, Deventer, The Netherlands*

11. Effect of the Duration of the C Phase of Pulsation on Milking Performance  
*Aaron K. Kochman<sup>1</sup>, Chuck Laney<sup>1</sup>, Stephen B. Spencer<sup>2</sup>, <sup>1</sup>Lauren AgriSystems, Ltd., New Philadelphia, Ohio, USA, <sup>2</sup>Spencer Consulting, State College, Pennsylvania, USA*
12. Milking Facilities, Management and Performance on Wisconsin Dairy Farms  
*Robert D. Bade, Douglas J. Reinemann, University of Wisconsin, Madison, Wisconsin, USA*
13. Milking Time Tests: Interpretation of Results  
*Morten Dam Rasmussen<sup>1</sup>, Odd Rønningen<sup>2</sup>, Martin Bjerring<sup>1</sup>, <sup>1</sup>Agricultural Sciences, University of Aarhus, Research Centre Foulum, Tjele, Denmark, <sup>2</sup>TINE Rådgiving, Ås, Norway*
14. Robot Versus Human Pre-milking Teat Preparation  
*Robert D. Bade, Douglas J. Reinemann, Paul D. Thompson, University of Wisconsin, Madison, Wisconsin, USA*
15. Initial Pressure Application to the Teat by Various C Phases  
*Aaron K. Kochman, Frank Saho III, Brooke Costello, Lauren AgriSystems, New Philadelphia, Ohio, USA*
16. Noncompliance with the Pasteurized Milk Ordinance Due to Blood in Milk  
*Justine Britten, Allan Britten, Dana Andre, Udder Health Systems, Inc., Jerome, Idaho, USA*
17. Diagnosis of Intramammary Infections Based on Sampling Strategy, Epidemiology of Pathogens and Agreement Beyond Chance  
*A. H. Torres<sup>a,b</sup>, P.J. Rajala-Schultz<sup>a</sup>, F.J. DeGraves<sup>a</sup>, K. H. Hoblet<sup>c</sup>, <sup>a</sup>The Ohio State University, Columbus, Ohio, USA, <sup>b</sup>Universidad Centroccidental "Lisandro Alvarado" Barquisimeto, Lara, Venezuela, <sup>c</sup>Mississippi State University, Starkville, Mississippi, USA*
18. Genetic Diversity and Expression of Enterotoxin of *Staphylococcus aureus* Associated with Bovine Mastitis  
*Leane Oliveira, Ana Carolina Rodrigues, Carol Hulland, Pamela Ruegg, University of Wisconsin, Madison, Wisconsin, USA*
19. In Vitro Susceptibility Testing of Pirlimycin Against Bovine Mastitis Pathogens Isolated as Part of an Ongoing Surveillance Program (2001-2005)  
*Cindy J. Lindeman, Lacie Johansen, Ellen S. Portis, Jeffrey L. Watts, Pfizer Animal Health, Kalamazoo, Michigan, USA*
20. Evaluating Somatic Cell Counts in Frozen Milk Samples Using the DeLaval DCC<sup>®</sup>  
*Warren D. Gilson, Stephen C. Nickerson, Lane O. Ely, University of Georgia, Athens, Georgia, USA*
21. Bulk Tank Milk Quality of Nine Dairy Farms in Tennessee Over a 12-month Period  
*B. E. Gillespie, S. Boonyayatra, M. J. Lewis, A. M. Saxton, S. P. Oliver, The University of Tennessee, Knoxville, Tennessee, USA*
22. Bulk Tank Surveillance Program for New York Dairies  
*Tonya Van Slyke<sup>1</sup>, Fabiola Nunes-Braga<sup>1</sup>, Daryl Nydam<sup>1</sup>, Ruth Zadoks<sup>1</sup>, John Huntley<sup>2</sup>, Ynte Schukken<sup>1</sup>, Cornell University, Ithaca, New York, USA, <sup>2</sup>New York State Department of Agriculture and Markets, Albany, New York, USA*
23. Bulk Tank SCC Variation as an Indicator of Herd Management Quality  
*J. K. Reneau, J. M. Lukas, University of Minnesota, St. Paul, Minnesota, USA*
24. DairyGuard<sup>™</sup> – Microarray Diagnosis of Mastitis Infection  
*Rod Card<sup>1</sup>, Nicolaas Smit<sup>3</sup>, Holger Klapproth<sup>2</sup>, Phil Wakeley<sup>1</sup>, <sup>1</sup>Veterinary Laboratories Agency, Weybridge United Kingdom, <sup>2</sup>University of Freiberg, Germany, <sup>3</sup>Safeguard Biosystems, United Kingdom*
25. Laboratory Evaluation of Potential On-Farm Culture Systems for Clinical Mastitis Cases  
*Jennifer McCarron, Greg Keefe, Atlantic Veterinary College, Charlottetown, Prince Edward Island, Canada*

26. Prevalence of Mastitis Pathogens Isolated from Dairy Herds with High BTSCC in Argentina  
*C.N. Acuña, G.F. Casasnovas, J. Gatti, S. Aramendi, V. Finia, PURO (United Milk Producers Cooperative from Route Eight) Laboratory, San Antonio de Areco, Argentina*
27. Prevalence of Subclinical Mastitis in the Region of Florida, Uruguay  
*L. Albornoz, C.N. Acuña, M. Pacheco, S. Peña, Centro Diagnóstico Veterinario, Florida, Uruguay*
28. Real-Time Polymerase Chain Reaction for Simultaneous Detection of Mastitis Pathogens Directly From Milk  
*M. L. Maxwell, B. E. Gillespie, S. P. Oliver, The University of Tennessee, Knoxville, Tennessee, USA*
29. Somatic Cell, Microbiological, and Differential Leukocyte Assessment of Milks from Early Post-partum Cows  
*Kevin Anderson, Roberta Lyman, Ariel Rivas, College of Veterinary Medicine, North Carolina State University, Raleigh, North Carolina, USA*
30. The Effect of Dry Cow Treatment on Antibiotic Resistance of Fecal *Escherichia coli* and of Mammary Quarter Isolates  
*Etienne Poirier<sup>1</sup>, Emile Bouchard<sup>1</sup>, Serge Messier<sup>1</sup>, David Leger<sup>2</sup>, Jérôme Del Castillo<sup>1</sup>, Päivi Rajala-Schultz<sup>3</sup>, Valérie Côté<sup>1</sup>, Marielle St-Laurent<sup>1</sup>, Jean-David Perrault<sup>1</sup>, Daniel Scholl<sup>1</sup>, <sup>1</sup>University of Montreal, Saint-Hyacinthe, Québec, Canada, <sup>2</sup>Public Health Agency of Canada, Guelph, Ontario, Canada, <sup>3</sup>The Ohio State University, Columbus, Ohio, USA*
31. Characteristics of Mastitis Agents in Brazilian Dairy Farms  
*Leandro Henrique Cruppe<sup>1</sup>, Fernanda Hoe<sup>2</sup>, Fábio Franco<sup>2</sup>, Carla Vasconcelos<sup>3</sup>, Universidade Estadual Paulista<sup>1</sup>, São Paulo, Brazil, Pfizer Animal Health<sup>2</sup>, São Paulo, Brazil, Laboratório Vida Vet<sup>3</sup>, São Paulo, Brazil*
32. Epidemiology and Production Effects of Subclinical Mastitis in a Milking Sheep Flock in Wisconsin  
*Carlo Spanu, Yves Berger, Dave Thomas, Pamela Ruegg, University of Wisconsin, Madison, Wisconsin, USA*
33. Identification of Sources of *Staphylococcus aureus* in Herds with Mastitis Problems  
*Aldo Capurro<sup>1,2</sup>, Karin Persson Waller<sup>1,2</sup>, Anna Aspàn<sup>1</sup>, Helle Ericsson Unnerstad<sup>1</sup>, Karin Artursson<sup>1</sup>, <sup>1</sup>National Veterinary Institute, Uppsala, Sweden, <sup>2</sup>Swedish University of Agricultural Sciences, Uppsala, Sweden*
34. Manure Solids Bedding as a Source of Clinical Environmental Mastitis  
*C. Locatelli<sup>1</sup>, L. Scaccabarozzi<sup>1</sup>, A. Casula<sup>1</sup>, F. Gorrieri<sup>2</sup>, A. Harouna<sup>1</sup>, P. Moroni<sup>1</sup>, <sup>1</sup>University of Milan, Milan, Italy, <sup>2</sup>Bovine Practitioner, Italy*
35. Prevalence and Antimicrobial Susceptibility of Mastitis Pathogens Isolated from Dairy Heifers in Argentina  
*E. Izak, J. C. Bonazza, Mastitis Prevention Services, Buenos Aires, Argentina*
36. Development of a Microarray Platform for Milk Pathogens Detection: Preliminary Results  
*Paola Cremonesi<sup>1</sup>, Giuliano Pisoni<sup>2</sup>, Massimo Luzzana<sup>3</sup>, Paola Sartorelli<sup>2</sup>, Paul Boettcher<sup>1</sup>, Bianca Castiglioni<sup>1</sup>, Paolo Moroni<sup>2</sup>, <sup>1</sup>Institute of Agricultural Biology and Biotechnology, <sup>2</sup>Department of Animal Pathology, Hygiene and Veterinary Public Health, <sup>3</sup>Department of Biomedical Sciences and Technologies, Milan, Italy*
37. The Evaluation of the Effect of a Miele PW 6065 Plus Washer on the Bacterial Load and Durability of Udder Towels, and Resulting Somatic Cell Count in Dairy Cows  
*John Las, Randy Dingwell, Ken Leslie, University of Guelph, Guelph, Ontario, Canada*
38. Vaccination with *Streptococcus uberis* Adhesion Molecule Induces Antibody Responses in Bovine Serum and Colostrum  
*M. E. Prado, D. A. Luther, M. J. Lewis, S. I. Headrick, R. A. Almeida, S. P. Oliver, The University of Tennessee, Knoxville, Tennessee, USA*
39. Efficacy of a *Staphylococcus aureus* Bacterin in Reducing the New Infection Rate and Somatic Cell Count in a Commercial Dairy  
*S. C. Nickerson<sup>1</sup>, E. P. Hovingh<sup>2</sup>, C. Peterson<sup>3</sup>, S. Brannock<sup>3</sup>, E. Schaffer<sup>3</sup>, P. W. Widell<sup>4</sup>, <sup>1</sup>University of Georgia, Athens, Georgia, USA, <sup>2</sup>Pennsylvania State University, University Park, Pennsylvania, USA, <sup>3</sup>James River Correctional Center, Goochland, Virginia, USA, <sup>4</sup>Boehringer Ingelheim Vetmedica, Inc., St. Joseph, Missouri, USA*

40. Raising Quality Awareness on the Dairy Farm  
*Robert Nugteren, Dairy Cheq Inc., Waterloo, Ontario, Canada*
41. Risk Factors Associated with Bulk Tank Milk Quality in Prince Edward Island Dairy Herds  
*A.M. Elmoslemany, G.P. Keefe, Atlantic Veterinary College, University of Prince Edward Island, Charlottetown, Prince Edward Island, Canada*
42. *Klebsiella* – Not By Bedding Alone  
*Ruth Zadoks, Marcos Munoz, Helen Griffiths, Gary Bennett, Ynte Schukken, Quality Milk Production Services, Cornell University, Ithaca, New York, USA*
43. *Klebsiella* in Feces of Dairy Cattle Where Does It come From?  
*Ruth Zadoks<sup>1</sup>, Helen Griffiths<sup>1</sup>, Marcos Munoz<sup>1</sup>, Gary Bennett<sup>1</sup>, Everett Thomas<sup>2</sup>, Ynte Schukken<sup>1</sup>, <sup>1</sup> Quality Milk Production Services, Cornell University, Ithaca, New York, USA, <sup>2</sup> W.H. Miner Agricultural Research Institute, Chazy, New York, USA*
44. Efficacy of a Bio-Hygienization Additive in Controlling the yeast-like Microalga *Prototheca Zopfii*  
*A. Zanierato<sup>1</sup>, P. Buzzini<sup>2</sup>, <sup>1</sup> SOP Srl, Busto Arsizio, Italy<sup>2</sup>, University of Perugia, Italy*
45. Teat Dips Repel Flies; Their Potential Relevance in Preventing Transmission of Mastitis Pathogens to Teat Ends  
*Charles Gradle, WestfaliaSurge, Inc., Romeoville, Illinois, USA*
46. Tennessee Quality Milk Initiative Update  
*K. H. Campbell, B. E. Gillespie, M. J. Lewis, S. I. Headrick, R. A. Almeida, S. P. Oliver, The University of Tennessee, Knoxville, Tennessee, USA*
47. The Use of Teats Dips to Improve Teat Condition Under South African Winter Conditions  
*Mario Lopez-Benavides, Tom Hemling, DeLaval Inc., Kansas City, Missouri, USA*
48. Use of Systemic Antibiotic Therapy in Prepartum Heifers to Reduce the Incidence of Intramammary Infections  
*G. Andres Contreras, P.M. Sears, Michigan State University, East Lansing, Michigan, USA*
49. Comparison of Two Formulations for Dry Cows on the Cure of Infections Caused by *Staphylococcus aureus*  
*C.N. Acuña, R.E. Chertcoff, G.F. Casasnovas, A. Dafner, P. Khalloub, PURO (United Milk Producers Cooperative from Route Eight) Laboratory, San Antonio de Areco, Argentina*
50. Relationship Between MIC of Gram-positive Mastitis Pathogens and Treatment Outcomes Following Intramammary Treatment with Cephapirin  
*M.D. Apparao<sup>1</sup>, P.L. Ruegg<sup>1</sup>, A. Lago<sup>2</sup>, S. Godden<sup>2</sup>, R. Bey<sup>2</sup>, R. Dingwell<sup>3</sup>, K. Leslie<sup>3</sup>, <sup>1</sup> University of Wisconsin, Madison, Wisconsin, USA, <sup>2</sup> University of Minnesota, St. Paul, Minnesota, USA, <sup>3</sup> University of Guelph, Guelph, Ontario, Canada*