



## Posters

Tuesday June 5<sup>th</sup>.

### Poster. Diagnostic, Immunology and Host Response

1. FACTORS AFFECTING MAP SAMPLE-TO-POSITIVE RATIO IN THE MILK OF IRISH DAIRY COWS.  
**Authors:** **Conor mc aloon**, Lorna citer.
2. IMMUNO-PROTEOMIC ANALYSIS OF SECRETORY PROTEINS OF NOVEL 'INDIAN BISON TYPE' BIOTYPE (STRAIN'S 5') OF *MYCOBACTERIUM PARATUBERCULOSIS* AND ITS DIAGNOSTIC SIGNIFICANCE IN DOMESTIC LIVESTOCK ENDEMIC FOR JHONE'S DISEASE.  
**Authors:** **Saurabh Gupta**, Shoor Vir Singh, A.K. Bhatia, Shivalingappa Yamanappa Mukartal, Doddamane Rathnamma, Kratika.
3. DEEP TRANSCRIPTOMIC PROFILING OF PRIMARY BOVINE MACROPHAGES IN COWS WITH JOHNE'S DISEASE SUGGESTS A CHANGE IN HOST LIPID METABOLISM AND A STATE OF INNATE IMMUNE TOLERANCE.  
**Authors:** **Nathalie Bissonnette**, Olivier Ariel, Nicolas Gévry, Gilles Fecteau, Eveline M. Ibeagha-Awemu.
4. DESIGN AND OPTIMIZATION OF A POLYPROTEIN FOR DIAGNOSIS OF BOVINE PARATUBERCULOSIS.  
**Authors:** **María Isabel Romano**, Natalia Alonso, Moyano Roberto Damian, Maria Laura Mon, Natanael Griffa, Magali Romero, Fiorela Alvarado Pinedo, Maria de la Paz Santangelo, Gabriel Traveria.
5. EVALUATION OF SEROLOGICAL TESTS FOR THE DETECTION OF PARATUBERCULOSIS IN ITALIAN BUFFALOS (*BUBALUS BUBALIS*): A CLASS LATENT APPROACH  
**Authors:** **Matteo Ricchi**, Giorgio Galletti, Simone Russo, Fabrizio Gamberale, Esterina DeCarlo, Norma Arrigon
6. MAMMARY EPITHELIAL CELLS PREVIOUSLY INFECTED BY *ESCHERICHIA COLI* ALTERS THE *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* TRANSLOCATION INFECTION. **David Germano Gonçalves Schwarz**, Fernanda Miyagaki Shoyama, Leandro Licursi Oliveira, Srinand Sreevatsan, Maria Aparecida Scatamburlo Moreira
7. PROTOTYPE OF THE REFERENCE STANDARD FOR THE QUANTIFICATION OF *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* BY QUANTITATIVE PCR IN FAECES.  
**Authors:** **Petr Kralik**, Monika Beinhauerova, Iva Slana



8. SENSITIVITY OF AURAMINE-RHODAMINE AND ZIEHL-NEELSEN STAINING FOR MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS DETECTION IN LIQUID CULTURE FROM ENVIRONMENTAL FECAL SAMPLES.

**Authors:** Enrico Inama, Marta Mainenti, Paola Fiorin, Annalucia Tondo<sup>1</sup> Marta Vascellari, Nicola Pozzato

9. DISEASE PROGRESSION IN SUSCEPTIBLE VERSUS RESILIENT MYCOBACTERIUM AVIUM SUBSPECIES PARATUBERCULOSIS (MAP) INFECTED COWS

**Authors:** Nathalie Bissonnette, D. Kelton, G. Fecteau, P. Griebel, F. Miglior

10. CYTOTOXIC T CELLS WITH ABILITY TO KILL INTRACELLULAR BACTERIA ARE ELICITED BY ANTIGEN PRESENTING CELLS PULSED WITH A MEMBRANE PROTEIN FROM MYCOBACTERIUM AVIUM PARATUBERCULOSIS

**Authors:** Cleverson D Souza<sup>1</sup>, Gaber S Abdellrazeq<sup>1</sup>, Mahmoud M Elnaggar<sup>1</sup>, John, P Bannantine<sup>2</sup>, William C Davis<sup>3</sup>.

11. MYCOBACTERIUM COMPLEX IN INDIAN LIVESTOCK: DEVELOPING DIAGNOSTICS FOR RESOURCE LIMITED AREAS

**Authors:** Rathnagiri Polavarapu, Rudrama Devi Punati, Prudhvi Chand Mallepaddi, Revathi Poonati, Mukta Jain, Jagdip Singh Sohal.

12. EVALUATION OF FOUR COMMERCIAL REAL-TIME PCR SYSTEMS FOR DETECTION OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS FROM BOVINE FAECAL SAMPLES

**Authors:** Giovanni Ghielmetti, Roger Stephan, Natasha Carroli, Ute Friedel, Simone Scherrer, Sarah Schmitt.

13. EFFECT OF FEEDING HEAT-TREATED COLOSTRUM ON CELL-MEDIATED IMMUNE RESPONSE TO MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS IN NEONATAL DAIRY CALVES

**Authors:** Fernanda Miyagaki Shoyama, Juliana Lie Taya, Scott J Wells, Judy R Stabel, Maxim C Cheeran, Srinand Sreevatsan, Sandra M Godden.

14. TRANSCRIPTIONAL PROFILING OF ILEOCECAL VALVE AND WHOLE BLOOD OF HOLSTEIN DAIRY COWS AT DIFFERENT STAGES OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS (MAP) INFECTION.

**Authors:** Marta Alonso-Hearn, Maria Canive, Rosana Torremocha, Ana Balseiro, Beatriz Soriano, Ricardo Ramos, Carlos Llorens, Rosa Casais.

15. COST-EFFECTIVE PARATUBERCULOSIS MANAGEMENT WITH AN EASY-TO-USE QPCR ON POOLS OF FAECES TO REDUCE RE-INFECTION PRESSURE

**Authors:** Laffont Mathieu, Grewis Lise, Forero Rafael, Greatrex Anna, Pourquier Philippe.



16. SEROPREVALENCE OF PARATUBERCULOSIS IN GOAT AND BOVINE CATTLE OF THE STATE OF SAN LUIS POTOSI, MEXICO.

**Authors:** Sosa-Martínez Luz Elena<sup>1</sup>, Lara-García Luis<sup>1</sup>, Vega- Manriquez Xochil<sup>1</sup>, Morón-Cedillo Felipe<sup>1</sup>, Castrellón-Ahumada Victoria<sup>2</sup>, Maldonado-Castro Edith<sup>2</sup>, Herrera- Corredor Alejandra<sup>1</sup>, Ballesteros- Rodea Gilberto<sup>1</sup>, Santos-Díaz Rosa Elena<sup>1</sup>, Chávez-Gris Gilberto<sup>2</sup>

17. SEROPREVALENCE OF PARATUBERCULOSIS IN GOAT HERDS OF THE STATE OF SAN LUIS POTOSÍ, MÉXICO.

**Authors:** Gilberto Ballesteros Rodea, Luis Alberto Lara García, Delia Xóchil Vega Manriquez, Gilberto Chávez gris.

18. PREVIOUS CONTACT OF GOAT KIDS WITH CORYNEBACTERIUM PSEUDOTUBERCULOSIS OR MYCOBACTERIUM AVIUM SUBSP HOMINISUIS INFLUENCES THE OUTCOME OF MYCOBACTERIUM AVIUM SUBSP PARATUBERCULOSIS INFECTION

**Authors:** Marcos Royo, Miguel Fernández, Iker A Sevilla, Noive Arteché, Raquel Vallejo, Miguel Fuertes, Daniel Gutiérrez-Expósito, M. Carmen Ferreras, Julio Benavides, Natalia Elguezabal, Valentín Pérez.

19. STUDY ON THE INTERFERENCE OF PARATUBERCULOSIS VACCINATION ON THE TUBERCULOSIS ERADICATION PROGRAM IN GOATS IN CASTILLA Y LEÓN (SPAIN)

**Authors:** Miguel Fernández, Ana Grau, Raquel Vallejo, Noive Arteché, Marcos Royo, Daniel Gutiérrez-Expósito, M. Carmen Ferreras, Benavides, Olga Mínguez, Valentín Pérez.

20. STANDARDIZATION OF ELISA-P35 FOR DIAGNOSIS PARATUBERCULOSIS FROM GOAT'S MILK

**Authors:** Alejandra Montserrat Hernández-Guerra, Victoria Elizabeth Castrellón-Ahumada, Abel Manuel Trujillo- García, Gilberto Chávez-Gris.

21. COMPARISON OF AN ANTIGEN DERIVED FROM MYCOBACTERIUM AVIUM WITH THE PROTOPLASMAL ANTIGEN OF MYCOBACTERIUM AVIUM SUBS. PARATUBERCULOSIS (PPA-3) FOR THE DIAGNOSIS OF PARATUBERCULOSIS THROUGH ELISA.

**Authors:** Edith Maldonado Castro, Verónica Blásquez Vázquez, Gabriel Campos Montes, Carolina García Sánchez, Carolina Segundo Zaragoza, Gilberto Chávez Gris.

22. DETECTION OF MYCOBACTERIUM AVIUM SUBSP PARATUBERCULOSIS THROUGH DIFFERENT DIAGNOSTIC TECHNIQUES IN UNGULATES KEPT IN CAPTIVITY IN MÉXICO.

**Authors:** Ana Laura Hernández Reyes, Gilberto Chávez Gris, Edith Maldonado Castro, Luz Elena Alcaraz Sosa.

23. THE POTENTIAL OF VOLATILE ORGANIC COMPOUNDS AS BIOMARKERS OF PARATUBERCULOSIS

**Authors:** Heike Koehler, Anne Küntzel, Sina Fischer, Elisa Kasbohm, Wolfram Miekisch, Petra Reinhold.



24. DETECTION OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS IN FAECES AND TISSUE OF SMALL RUMINANTS USING A NON - AUTOMATED LIQUIDE CULTURE SYSTEM METHOD.

**Authors: Luigi De Grossi**, Davide Santori, Antonino Barone, Silvia Abbruzzese, Matteo Ricchi, Gaetana Anita Marcario.

25. COMPARISON OF VERSATREK SYSTEM WITH SOLID HERROLD'S MEDIUM AND PCR METHODS FOR THE DETECTION OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS (MAP) FROM BUFFALOES FAECES.

**Authors: Pietrella Gabriele**, Bartolomé del Pino Leticia Elisa, Cersini Antonella, Gamberale Fabrizio.

26. ELISA UREA IN THE DIAGNOSIS OF PARATUBERCULOSIS: ESTIMATION OF SEROPREVALENCE IN SOME LOCALITIES OF BUENOS AIRES PROVINCE, ARGENTINA.

**Authors: Maria Fiorella Alvarado Pinedo**, Pedro S. Sosa, Leandro A. Di Paolo, Magali A. Romero, Luis M. Peralta, Gabriel E. Travería, R. Damian Moyano, Maria Jaureguiberry, M. Isabel Romano.

27. COMPARISON OF DIAGNOSTIC METHODS IN PARATUBERCULOSIS INFECTED HERD

**Authors: Iva Slana**, Vladimir Babak, Radka Dzedzinska.

28. COMPARISON BETWEEN TWO MOLECULAR GENOTYPING METHODS TO EVALUATE GENETIC DIVERSITY FOR MYCOBACTERIUM AVIUM SUBSP PARATUBERCULOSIS IN ARGENTINA

**Author: Brenda Vasini Rosell**, Andrea Gioffré, Karina Cirone, Claudia Morsella, Laura Mendez, Monika Moravkova, Fernando Paolicchi

29. MLVA GENOTYPING OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS ISOLATES IN ARGENTINA

**Authors: Brenda Vasini Rosell**, Karina Cirone, Claudia Morsella, Laura Mendez, Andrea Gioffré, Fernando Paolicchi

30. DEVELOPMENT OF LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) ASSAY FOR DETECTION OF MYCOBACTERIUM AVIUM SUBSPP. PARATUBERCULOSIS INFECTION IN ANIMALS.

**Authors: Shivalingappa Yamanappa Mukartal**, Doddamane Rathnamma, Hogalagere Doddappaiah Narayanaswamy, Shrikrishna Isloor, Shoorvir Singh, Manju Singh.

31. ISOLATION AND MOLECULAR CHARACTERIZATION OF MYCOBACTERIUM AVIUM SUBSPECIES PARATUBERCULOSIS FROM RUMINANTS IN KARNATAKA

**Authors: Shivalingappa Yamanappa Mukartal**, Doddamane Rathnamma, Hogalagere Doddappaiah Narayanaswamy, Shrikrishna Isloor, Shoorvir Singh, Kundan Kumar Chaubey



32. IDENTIFICATION OF BOVINE MICRORNA AS POTENTIAL BIOMARKERS OF EARLY MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS INFECTION.

**Authors:** **Gianpiero Zamperin**, Elisabetta Stefani, Alice Fusaro, Massimo Bottazzari, Adelaide Milani, Annalucia Tondo, Alessia Schivo, Laura Paganini, Isabella Monne, Nicola Pozzato

33. DEVELOPMENT OF RAPID ONSITE CASSETTE BASED SEROLOGICAL DIAGNOSTIC KIT FOR PARATUBERCULOSIS

**Authors:** **Mukta Jain**, Prudhvi Chand Mallepaddi, Rathnagiri Polavarapu, G. K. Aseri, Parul Yadav, Jagdip Singh Sohal.

34. FIELD USE SKIN TEST BASED ON TYPE IV HYPERSENSITIVITY USING NOVEL SECRETORY ANTIGENS FOR DETECTING PARATUBERCULOSIS INFECTION

**Author:** **Mukta Jain**, Rathnagiri Polavarapu, G. K. Aseri, Amit Kumar Singh, Deepansh Sharma, Jagdip Singh Sohal

35. DEUTERIUM TRACER BASED CELLULAR DYNAMICS OF TISSUE MACROPHAGES ISOLATED FROM GOAT KIDS AND ADULT GOATS IN RELATION THE PATHOGENESIS OF CAPRINE PARATUBERCULOSIS.

**Author:** **Ad Koets**, Antonios Zagaris, Lars Ravesloot, Karianne Lievaart-Peterson, Mariona Baliu-Pique, Sigrid Otto, Laura Ackermans, Kiki Tesselaar, José Borghans.

36. SYSTEMIC MONOCYTE/MACROPHAGE CHANGES IN RESPONSE TO MAP INFECTION

**Authors:** **Kumudika de Silva**, Hannah B. Pooley, Shyamala Thirunavukkrasu, Hilary Connors, Chad Cooper, Douglas J. Begg, Auriol C. Purdie, Karren M. Plain.

37. THE POTENTIAL ROLE OF TH17-LIKE IMMUNE RESPONSES IN JOHNE'S DISEASE POSITIVE COWS

**Authors:** **Justin L. DeKuiper**, Paul M. Coussens.

38. CATHELICIDINS REDUCE MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS INTERNALIZATION IN MURINE MACROPHAGES

**Authors:** **Karina Cirone**, Priyoshi Lahiri, Ravi Holani, Yin Lin Tang, Jeroen De Buck, Eduardo R. Cobo.

39. PRIMARY ISOLATION RATES OF PARATUBERCULOSIS BACILLI ON DIFFERENT SOLID MEDIA

**Authors:** **Amit Kumar Singh**, Mukta Jain, Deepansh Sharma, Neeraj Khare, Parul Yadav, Jagdip Singh Sohal



40. COMPARISON OF THE SENSITIVITIES AND SPECIFICITIES OF FIVE ELISAS BASED ON DETECTION OF HOST BIOMARKERS FOR DETECTION OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS (MAP) INFECTION

**Author: Cristina Blanco Vázquez**, Marta Alonso-Hearn, Ana Balseiro, Ramón Antonio Juste, José Miguel Prieto, Rosana Torremocha, Beatriz soriano, Ricardo Ramos, Carlos Llorens, Javier Amado, Rosa Casais

41. EFFECT OF PARATUBERCULOSIS INFECTION ON WELFARE PARAMETERS OF DAIRY COWS

**Authors: Leo Simone**, Calamari Luigi, Arrigoni Norma, Tamba Marco, Amadori Massimo.

42. UBIQUITOUS ANTIBODY RESPONSES TO THE POLAR GLYCOLIPID PHOSPHADITYLINOSITOL MANNOSIDE (PIM) LIMIT SEROLOGICAL TEST SPECIFICITY IN CATTLE

**Author: Ad Koets**

43. EVALUATION OF SEROLOGICAL TESTS FOR THE DETECTION OF PARATUBERCULOSIS IN ITALIAN BUFFALOS (BUBALUS BUBALIS): A CLASS LATENT APPROACH

**Authors: Matteo Ricchi**, Giorgio Galletti, Simone Russo, Fabrizio Gamberale, Esterina DeCarlo, Norma Arrigoni.

44. IMMUNOLOGICAL EVALUATION OF RECOMBINANT BACTERIOPHAGE P35 AS A VACCINE IN A NATURALLY INFECTED SHEEP FLOCK

**Author: Victoria Elizabeth Castrellón Ahumada**, Edith Maldonado Castro, María Elena Munguía Zamudio, Karen Manoutcharian, Antonio Verdugo Rodríguez, Yesmín María Domínguez Hernández, Gilberto Chávez-Gris

45. ISOTYPES CHARACTERIZATION OF THE MAP-SPECIFIC EARLY IMMUNE RESPONSE IN EXPERIMENTALLY INFECTED CALVES BY IMMUNOBLOT

**Authors: Bárbara Fernández**, Silvia Colavecchia, Ana Jolly, Fernando Paolicchi, Silvia Mundo.

46. CYTOKINE GENE EXPRESSION PROFILES IN THE BLOOD OF CLINICAL AND NON-CLINICAL SHEEP AND GOATS INFECTED WITH MYCOBACTERIUM AVIUM SUBSPECIES PARATUBERCULOSIS

**Authors: Ganesh Gangaram Sonawane**, Bhupendra Nath Tripathi<sup>1</sup>, L.L.L. Prince<sup>2</sup>, Rajendra Kumar Meena<sup>1</sup>.



**Wednesday June 6<sup>th</sup>.**  
**Poster. Map Control Programs and Epidemiology.**

47. INSIGHTS ON PARATUBERCULOSIS IN CATTLE AT A REGIONAL SCALE USING DATA-DRIVEN MODELING AND INFERENCE

**Authors:** Gael Beaunee, Pauline Ezanno, Alain Joly, Pierre Nicolas, Elisabeta Vergu.

48. OCCURRENCE OF SUBCLINICAL PARATUBERCULOSIS IN BUFFALOES FROM BAIXADA MARANHENSE, BRAZIL. **Authors:** Thais Rocha, Emerson Antônio Araújo de Oliveira, Isabel Azevedo Carvalho, Hamilton Pereira Santos, Helder de Moraes Pereira.

49. GENOTYPING OF *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* ISOLATES FROM ARGENTINIAN CATTLE USING MIRU-VNTRS AND SSR (SHORTS SEQUENCE REPEATS). **Authors:** Roberto Damian Moyano, Imperiale Belen, Romero Magali, Alvarado Pinedo Fiorella, Santangelo Maria Paz, Traveria Gabriel E., Romano María Isabel.

50. UTILISING FARMER FEEDBACK TO IMPROVE THE UK NATIONAL JOHNE'S MANAGEMENT PLAN.

**Authors:** Pete Orpin, Dick Sibley.

51. THE USE OF THE NET PROMOTER SCORE AND FARMER ATTITUDES AND BELIEF TO SHAPE THE UK NATIONAL JOHNES MANAGEMENT PLAN.

**Authors:** Pete Orpin, Dick Sibley.

52. FREQUENCY OF PARATUBERCULOSIS IN GOATS FROM REGIONS III AND IV OF GUANAJUATO, MÉXICO.

**Authors:** José Luis Gutiérrez Hernández, Meza Ugalde José María, Herrera López Enrique, Palomares Resendiz Erika Gabriela.

53. EPIDEMIOLOGY, 'BIO-TYPE PROFILE' AND BIO-LOAD OF *MYCOBACTERIUM AVIUM SSP. PARATUBERCULOSIS* INFECTION IN DOMESTIC LIVESTOCK, WILD ANIMALS, ENVIRONMENT, MILK, MILK PRODUCTS INCLUDING HUMAN POPULATION AND CONTROL STRATEGIES: INDIAN PERSPECTIVE.

**Authors:** Shoor Vir Singh, Pravin Kumar Singh, Ajay Vir Singh, Kuldeep Dhama, Krishna Dutta Rawat, Sujata Jayaraman.

54. FARMER'S ATTITUDES TOWARDS PARATUBERCULOSIS CONTROL IN CATTLE.

**Authors:** Donat Karsten, René Pützschel, Veit Zoche-Golob.



55. EFFECTIVENESS OF ZEOLITE CLINOPTILOLITE AND COPPER OXIDE ON *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* SURVIVAL  
**Authors:** Nicolás González, Pamela Steuer, Carolina Avilez, Carlos Tejada, Alfredo Ramirez-Reveco, Miguel Salgado.
56. MOLECULAR CHARACTERIZATION OF BOVINE *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* FROM KOREAN CATTLE FARMS USING IS1311 PCR-REA, MIRU-VNTR AND MLSSR GENOTYPING  
**Authors:** Han Sang Yoo, Hong-Tae Park, Hyun-Eui Park, Woo Bin Park, Suji Kim.
57. MANAGEMENT AND HUSBANDRY PRACTICES ASSOCIATED WITH POTENTIAL TRANSMISSION OF *PARATUBERCULOSIS* ON DAIRY FARMS  
**Authors:** Dick Sibley BVSc HonFRCVS, Pete Orpin BVSc MRCVS.
58. DETECTION OF ANTI-*MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* ANTIBODIES IN FREE-RANGING WILD DEER IN THE EASTERN PLAINS AND CARIBBEAN REGION OF COLOMBIA  
**Authors:** María de los Ángeles Largo Quintero, Jhon Jairo Tuberquia Londoño, Mauricio Sánchez Vallejo, Mariana Machado Arango, Santiago Rodríguez Vélez, Santiago Monsalve, Nathalia M Correa- Valencia, Jorge A Fernández-Silva.
59. NEW BIOSECURITY AND *PARATUBERCULOSIS* TOOLS IN QUEENSLAND  
**Authors:** Lawrence Gavey, Rob Barwell.
60. SEROPREVALENCE AND IDENTIFICATION OF *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* IN OVINE FLOCKS OF THE AGUASCALIENTES VALLEY AND ASSOCIATED RISK FACTORS.  
**Gabriel Ernesto Pallás Guzmán**, Gilberto Chávez Gris, Teódulo Quezada Tristán, Edith Maldonado Castro, Leticia Chávez González.
61. SERO-SURVEILLANCE OF *PARATUBERCULOSIS* AND BRUCELLOSIS IN DOMESTIC RUMINANT SPECIES OF WESTERN INDIA.  
**Authors:** Jagdip Singh Sohal, Mukta Jain, Rathnagiri Polavarapu, B. S. Chandel, H. C. Chauhan, G. K. Aseri.
62. SEROPREVALENCE AND RISK FACTORS ASSOCIATED WITH *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* INFECTION IN SHEEP FLOCKS LOCATED AT SOME REGIONS IN THE DEPARTMENT OF ANTIOQUIA, COLOMBIA  
**Authors:** Miguel Hernández-Agudelo, Nicolás F. Ramírez-Vásquez, Miguel A. Salgado-Alfaro, Jorge A. Fernández-Silva.





63. CO-EXISTENCE OF CATTLE WITH OTHER RUMINANTS IS ASSOCIATED WITH *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* PRESENCE IN ENVIRONMENTAL SAMPLES FROM DAIRY HERDS IN NORTHERN ANTIOQUIA, COLOMBIA  
**Authors:** **Nathalia M Correa-Valencia**, Nicolás F Ramírez-Vásquez, Jorge A Fernández-Silva, Juan C Arango-Sabogal, Gilles Fecteau.
64. FAECAL SHEDDING OF *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* IN VACCINATED DAIRY GOAT KIDS  
**Authors:** **Karianne Lievaart-Peterson**, Ad P. Koets, Robin Ruuls, Maarten F. Weber.
65. HERD PREVALENCE ESTIMATES OF *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* INFECTION IN SASKATCHEWAN, CANADA, BASED ON ENVIRONMENTAL SAMPLES COLLECTED AT TWO SAMPLING PERIODS, 3 YEARS APART  
**Authors:** **Caroline S. Corbett**, S. Ali Naqvi, Jeroen De Buck, Uliana Kanevets, John P. Kastelic<sup>1</sup>, Herman Barkema.
66. THE SEROPREVALENCE OF *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* IN TWO BEEF CATTLE OF BUENOS AIRES ARGENTINA.  
**Authors:** **Silvia Colavecchia**, Bárbara Fernández, Marcelo Tropeano, Fernando Paolicchi, Silvia Mundo.
67. EVALUATION OF THE PERFORMANCE OF INSPECTORS IN THE DETECTION OF PARATUBERCULOSIS (OJD) IN SHEEP BY ABATTOIR MONITORING.  
**Authors:** **Ian J Links**, Laurence J Denholm.

**Thursday June 7<sup>th</sup>.**  
**Poster. Pathogenomics and Map Biology**

68. STUDIES ON THE 'HOST BIOMARKERS' FOR THE GENETIC SUSCEPTIBILITY TO *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* INFECTION IN HUMAN PATIENTS SUFFERING FROM ABDOMINAL DISORDERS IN INDIA, USING REAL-TIME BASED REVERSE TRANSCRIPTION PCR  
**Authors:** **Saurabh Gupta**, Shoor Vir Singh, Manju Singh, Kundan Kumar Chaubey, Abdul Qayoom MirF, Adil Majid Bhat.
69. PATHO-MOLECULAR STUDIES ON PARATUBERCULOSIS IN BUFFALOES (*BUBALUS BUBALIS*) IN MALWA REGION OF MADHYA PRADESH  
**Authors:** **Gayaprasad Jatav**, U. K. Garg, Shoorvir Singh, Ajay Gautam, Shalini Sharma, Naveen Kumar.



70. MAP3773C A ZUR PROTEIN: BIOCHIMICAL ANALYSIS AND REGULATORY FUNTION IN THE ZINC REGULON OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS  
**Authors:** **Bertha Landeros Sanchez**, José A. Gutiérrez – Pabello, German Ibarra Molina, Yunuen Nieto Morin, Alexes González Cornejo, Lilia A. Hurtado Ayala, Mirna C. Brito Perea, Esteban Hernández Guevara, Dania M. Díaz Padilla, Ángela Fernández Otal, María Fillat.
71. DECIPHERING THE VIRULENCE AND INTERACTION OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS (MAP) ISOLATES WITH ANIMAL HOST MACROPHAGES USING MATHEMATICAL MODELS  
**Authors:** **Marta Alonso-Hearn**, Gesham Magombedze, Naiara Abendaño, Mariana Landin, Ramon A. Juste.
72. NATURAL TRANSMISSION OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS FROM A MIXED BREED BOER GOAT TO A VIETNAMESE POT-BELLIED PIG.  
**Authors:** **Lucy R. Hancock**, Christine Ward, Jaclyn Dykstra, Janes E. Collins, Adel Talaat, Michael T. Collins.
73. LIVER TRANSCRIPTOME AND NETWORK ANALYSES REVEAL GENES AND BIOLOGICAL PROCESSES AFFECTED BY MYCOBACTERIUM AVIUM SSP. PARATUBERCULOSIS INFECTION  
**Authors:** **Nathalie Bissonnette**, Duy N. Do, Pier-Luc Dudemaine, Eveline Ibeagha-Awemu.

**Friday June 8th.**  
**Poster. Public Health and Map Enviroment**

74. BIO-LOAD AND BIO-TYPE PROFILE OF MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS IN RAW MILK AND COMMERCIAL MILK PRODUCTS USING 6 ANTIGEN AND ANTIBODY BASED TESTS  
**Authors:** **Manju Singh**, Shoor Vir Singh, Sachin Digamber Audarya, Shaswati Pany, Adya Prakash Rath, Sangram Biswal.
75. DETECTION AND ISOLATION OF MAP FROM SKELETAL MUSCLE TISSUE OF 39 % OF 143 CATTLE AT AN ABATTOIR  
**Authors:** **Heinrich Dahmen**, Dr. Marc Duenner, Dr. Karl Zimmer, Dr. Dirk Steinhauer, Prof. John Hermon-Taylor, Neil Rayment.
76. ANAEROBIC FERMENTATION OF SLURRY IN MESOPHILIC BIOGAS PLANTS REDUCES *MYCOBACTERIUM AVIUM SUBSP. PARATUBERCULOSIS* IN THE DIGESTATE



**14<sup>th</sup> INTERNATIONAL  
COLLOQUIUM OF PARATUBERCULOSIS**  
RIVIERA MAYA, MEXICO, JUNE 4<sup>th</sup>-8<sup>th</sup>, 2018



International Association for  
Paratuberculosis

**Authors:** Donat Karsten, Susanne W. Eisenberg<sup>1</sup>, Esra Einax<sup>2</sup>, Gerd Reinhold<sup>3</sup>, Veit Zoche-Golob

77. MAP IN DAIRY GOAT COLOSTRUM AND MILK

**Authors:** Karianne Lievaart-Peterson, Saskia Lutikholt, Maarten F. Weber, Maaïke Gonggrijp, Robin Ruuls, Ad P. Koets.

78. *MYCOBACTERIUM AVIUM* SUPESPECIES *PARATUBERCULOSIS* OCCURENCE IN CROHN'S DISEASE PATIENTS AT A BRAZILIAN REFERRAL CENTER FROM 2007 TO 2017

**Authors:** Isis de Freitas Espeschit, Antônio Augusto Fonseca Jr., Jéssica Lobo Albuquerque, Maria de Lourdes Abreu Ferrari, Maria Aparecida Scatamburlo Moreira, Isabel Azevedo Carvalho.

79. DETECTION OF *MYCOBACTERIUM AVIUM* SUBSP. *PARATUBERCULOSIS* IN COMMERCIAL MILK AND MILK PRODUCTS IN ARGENTINA

**Authors:** Karina Cirone, Claudia Morsella, Laura Mendez, Fernando Paolicchi.

80. MAP AND ZNT8 PEPTIDES INDUCE IMMUNE RESPONSES IN PBMC OF T1D PATIENTS

**Authors:** Magdalena Niegowska, Izabela Kubiszewska, Lidia Gackowska, Ewa Balas, Joanna Trojanek, Mieczyslaw Szalecki, Jacek Michalkiewicz, **Leonardo A. Sechi.**