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Welcome to our first Newsletter!

We are pleased to release the first issue of the JDIP newsletter – simply titled “JDIP News”. The primary purpose of this newsletter is to enhance intramural communications and ensure that JDIP participants and stakeholders are updated on news of relevance to our community.

So what sort of material should you expect to find in JDIP News? As the title would suggest, news regarding the program itself along with progress that is being made in various projects and core facilities that are part of JDIP will be a focus of the newsletter. We also would like to explore the opportunity to include other items of relevance to the community – news you can use - for example, sections on funding opportunities; recent publications; upcoming meetings, conferences and workshops, and maybe even a joke or cartoon!

JDIP News Updates

JDIP Investigators are Assisting with USDA-APHIS-VS Grant Proposal Review.

JDIP team members will serve as scientific reviewers for grant proposals submitted to the recent USDA-APHIS-VS request for applications for John’s related research, with APHIS making the final award decisions. There are two panels that have been formed for the initial review: Ian Gardner (UC Davis) is chairing the Epidemiological and Extension panel, and Judy Stabel and John Bannantine (both from the USDA NADC) are co-chairing the Diagnostics and Molecular Biology panel.



Our plans call for the newsletter to be released on a monthly basis, however, the frequency of issue (monthly / quarterly) will depend entirely on community feedback and participation. Please do let us know your thoughts on the frequency that you would like to see this newsletter. In this era of google, blogs, spam and general information overload, we recognize that it is sometimes very tempting to hit the delete key before the download is complete and hence don’t wish to contribute anymore to cyberclutter.

We do look forward to your feedback and contributions to JDIP News – hope you are having wonderful summer!

Initial reviews are planned for June 22, 2005, and a final review for mid July, when both panels will meet to scientifically evaluate all of the submitted proposals and provide feedback to Michael Carter, the program director for this initiative at USDA-APHIS-VS.

Approximately \$500,000 in John’s Disease research funding will be awarded through this program!

We will keep you updated on the progress of the review – thanks in advance to the panel chairs and all of the reviewers who are volunteering their efforts and keeping this important process moving ahead in a timely manner.

JDIP News Updates – contd.



The 8th International Colloquium on Paratuberculosis will be held in Copenhagen, Denmark from August 14 through 18, 2005. More information regarding the colloquium can be found at www.8icp.dk

JDIP will shortly be issuing an RFA for funding of year 2 proposals.

As proposed by the JDIP external advisory board (EAB) and approved by the JDIP Steering Committee, Year 2 funding of projects through JDIP will be awarded based on an RFA (Request for Application) and competitive peer-review process. The RFA is being finalized and will likely be announced during the week of June 27, 2005, with proposals due on August 8. This RFA will solicit

applications for continued funding of current projects and core proposals as well as new developmental project proposals from investigators who are currently not funded by JDIP.

Final reviews are scheduled to occur at the 8th International Colloquium on Paratuberculosis meeting during the week of Aug. 14-18, 2005, and the recommendations of the steering committee sent to the EAB for their input.

JDIP to sponsor attendance at the “Workshop on Test Evaluation and Application to Paratuberculosis”

The JDIP steering committee has approved sponsorship of the attendance for up to 4 graduate students and young investigators to attend the “Workshop on Test Evaluation and Application to Paratuberculosis” to be held Aug. 19-20 at the tail end of the upcoming International Colloquium on

Paratuberculosis in Copenhagen, Denmark.

The complete announcement was recently sent to JDIP members for distribution to interested individuals, and, for those interested in applying is posted on the 8th ICP web site – www.8icp.dk.

Remember, applications are due June 24, 2005. Please contact Rachel Surber (surbe002@umn.edu) for more information.

JDIP EAB Meeting a Success!

The JDIP External Advisory Board (EAB) met during April 1 and 2 of 2005 in St. Paul, Minnesota to evaluate the current state of the program and provide guidance to the JDIP steering committee regarding future initiatives and opportunities for improving the program.

At this meeting, the EAB was provided an overview on all activities funded through JDIP and given an opportunity to interact directly with JDIP project and core leaders. Larry Hutchinson (Prof. Emeritus, Penn State) was elected Chair of the EAB, and together with other members has provided valuable feedback and recommendations to the group. Our special thanks to all of the EAB members

for their commitment to making JDIP a success, and a special thanks to EAB members, Michael Carter (USDA-APHIS-VS), Tom Gomez (USDA-APHIS-CDC), Bill Hartman (Minn. Board of Animal Health); Larry Hutchinson (Penn State); John Adams (Nat. Milk Producers Federation); Cindy Wolf (American Sheep Assoc.); Gerald Gerlach (Inst. Mikrobiologie, Germany); David Kennedy (Animal Health Australia), and Mark Tizard (CSIRO, Australia) for attending the meeting. Our thanks also to Peter Johnson (USDA-CSREES) for helping provide funding agency perspective and support and participating in the EAB meeting via teleconference.



Upcoming Meetings and Conferences that may be of Interest

- AVMA Annual Convention. Minneapolis, MN July 16-20. 2005. www.avma.org/convention/default.asp.
- International Colloquium on Paratuberculosis. Copenhagen, Denmark August 14-18 2005. www.8icp.dk.
- Annual Conference of the American Association of Bovine Practitioners. Salt Lake City, UT September 22-24, 2005. <http://www.aabp.org/meeting/>
- USAHA / AAVLD Annual Meetings, Hershey, PA November 3-10, 2005. <http://www.usaha.org/meetings/>
- Conference of Research Workers in Animal Diseases, St. Louis, MO, December 4-6, 2005. <http://www.cvmb.colostate.edu/microbiology/crwad/index.htm>

Recent Johne's Related Publications – (April through July 2005)

- Biet, F., et al., *Zoonotic aspects of Mycobacterium bovis and Mycobacterium avium-intracellulare complex (MAC)*. Vet Res, 2005. **36**(3): p. 411-36.
- Ravva, S.V. and L.H. Stanker, *Real-time quantitative PCR detection of Mycobacterium avium subsp. paratuberculosis and differentiation from other mycobacteria using SYBR Green and TaqMan assays*. J Microbiol Methods, 2005.
- Crossley, B.M., et al., *Fecal shedding of Mycobacterium avium subsp. paratuberculosis by dairy cows*. Vet Microbiol, 2005. **107**(3-4): p. 257-63.
- Coussens, P.M., et al., *Johne's disease in cattle is associated with enhanced expression of genes encoding IL-5, GATA-3, tissue inhibitors of matrix metalloproteinases 1 and 2, and factors promoting apoptosis in peripheral blood mononuclear cells*. Vet Immunol Immunopathol, 2005. **105**(3-4): p. 221-34.
- Waldner, C.L., *Serological status for N. caninum, bovine viral diarrhoea virus, and infectious bovine rhinotracheitis virus at pregnancy testing and reproductive performance in beef herds*. Anim Reprod Sci, 2005.
- Storset, A.K., I. Berg, and B. Djonje, *Evaluation of the gamma interferon test for diagnosis of paratuberculosis in goats*. Vet Immunol Immunopathol, 2005.
- Sivakumar, P., B.N. Tripathi, and N. Singh, *Detection of Mycobacterium avium subsp. paratuberculosis in intestinal and lymph node tissues of water buffaloes (Bubalus bubalis) by PCR and bacterial culture*. Vet Microbiol, 2005.
- Rodriguez-Lazaro, D., et al., *Real-time PCR-based methods for detection of Mycobacterium avium subsp. paratuberculosis in water and milk*. Int J Food Microbiol, 2005. **101**(1): p. 93-104.
- Sigurdardottir, O.G., et al., *Mycobacterium avium subsp. paratuberculosis enters the small intestinal mucosa of goat kids in areas with and without Peyer's patches as demonstrated with the everted sleeve method*. Comp Immunol Microbiol Infect Dis, 2005. **28**(3): p. 223-30.
- Motiwala, A.S., et al., *Rapid detection and typing of strains of Mycobacterium avium subsp. paratuberculosis from broth cultures*. J Clin Microbiol, 2005. **43**(5): p. 2111-7.
- Johansen, T.B., et al., *Distribution of IS1311 and IS1245 in Mycobacterium avium subspecies revisited*. J Clin Microbiol, 2005. **43**(5): p. 2500-2.
- Ellingson, J.L., et al., *Detection of viable Mycobacterium avium subsp. paratuberculosis in retail pasteurized whole milk by two culture methods and PCR*. J Food Prot, 2005. **68**(5): p. 966-72.

Recent Johne's Related Publications – (April through July 2005) – contd.

- Roussel, A.J., et al., *Prevalence of and risk factors for paratuberculosis in purebred beef cattle*. J Am Vet Med Assoc, 2005. **226**(5): p. 773-8.
- Simutis, F.J., N.F. Cheville, and D.E. Jones, *Investigation of antigen-specific T-cell responses and subcutaneous granuloma development during experimental sensitization of calves with Mycobacterium avium subsp paratuberculosis*. Am J Vet Res, 2005. **66**(3): p. 474-82.
- Langelaar, M.F., et al., *Mycobacterium avium ssp. paratuberculosis recombinant heat shock protein 70 interaction with different bovine antigen-presenting cells*. Scand J Immunol, 2005. **61**(3): p. 242-50.
- Ayele, W.Y., et al., *Mycobacterium avium subspecies paratuberculosis cultured from locally and commercially pasteurized cow's milk in the Czech Republic*. Appl Environ Microbiol, 2005. **71**(3): p. 1210-4.
- Hughes, M.S., et al., *Molecular analyses of mycobacteria other than the M. tuberculosis complex isolated from Northern Ireland cattle*. Vet Microbiol, 2005. **108**(1-2): p. 101-12.
- Langelaar, M.F., et al., *Cytokine gene expression profiles of bovine dendritic cells after interaction with Mycobacterium avium ssp. paratuberculosis (M.a.p.), Escherichia coli (E. coli) or recombinant M.a.p. heat shock protein 70*. Vet Immunol Immunopathol, 2005.
- Schlegel, P.M., et al., *Attachment of Mycobacterium avium subspecies paratuberculosis to bovine intestinal organ cultures: Method development and strain differences*. Vet Microbiol, 2005.
- Nagata, R., et al., *Expression cloning of gamma interferon-inducing antigens of Mycobacterium avium subsp. paratuberculosis*. Infect Immun, 2005. **73**(6): p. 3778-82.
- Matejtschuk, P., et al., *A comparison of vials with ampoules for the storage of biological reference materials*. Biologicals, 2005. **33**(2): p. 63-70.
- Hostetter, J., R. Kagan, and E. Steadham, *Opsonization Effects on Mycobacterium avium subsp. paratuberculosis-Macrophage Interactions*. Clin Diagn Lab Immunol, 2005. **12**(6): p. 793-6.
- Grant, I.R., et al., *Efficacy of Various Pasteurization Time-Temperature Conditions in Combination with Homogenization on Inactivation of Mycobacterium avium subsp. paratuberculosis in Milk*. Appl Environ Microbiol, 2005. **71**(6): p. 2853-61.
- Ellingson, J.L., et al., *Detection of Mycobacterium avium subspecies paratuberculosis in free-ranging bison (Bison bison) by PCR*. Mol Cell Probes, 2005. **19**(3): p. 219-25.
- Collins, M.T., et al., *Evaluation of five antibody detection tests for diagnosis of bovine paratuberculosis*. Clin Diagn Lab Immunol, 2005. **12**(6): p. 685-92.
- Sartor, R.B., *Does Mycobacterium avium subspecies paratuberculosis cause Crohn's disease?* Gut, 2005. **54**(7): p. 896-8.
- Autschbach, F., et al., *High prevalence of Mycobacterium avium subspecies paratuberculosis IS900 DNA in gut tissues from individuals with Crohn's disease*. Gut, 2005. **54**(7): p. 944-9.
- VanLeeuwen, J.A., et al., *Seroprevalence of antibodies against bovine leukemia virus, bovine viral diarrhea virus, Mycobacterium avium subspecies paratuberculosis, and Neospora caninum in dairy cattle in Saskatchewan*. Can Vet J, 2005. **46**(1): p. 56-8.
- Raizman, E.A., et al., *Mycobacterium avium subsp. paratuberculosis from free-ranging deer and rabbits surrounding Minnesota dairy herds*. Can J Vet Res, 2005. **69**(1): p. 32-8.

Recent Johne's Related Publications – (April through July 2005) – contd.

- Alvarez, J., et al., *Mycobacterium avium subspecies paratuberculosis in fallow deer and wild boar in Spain*. Vet Rec, 2005. **156**(7): p. 212-3.
- de Juan, L., et al., *Genetic diversity of Mycobacterium avium subspecies paratuberculosis isolates from goats detected by pulsed-field gel electrophoresis*. Vet Microbiol, 2005. **106**(3-4): p. 249-57.
- Windsor, P.A., et al., *Injury caused by self-inoculation with a vaccine of a Freund's complete adjuvant nature (Gudair) used for control of ovine paratuberculosis*. Aust Vet J, 2005. **83**(4): p. 216-20.
- Weiss, D.J., et al., *A critical role of interleukin-10 in the response of bovine macrophages to infection by Mycobacterium avium subsp paratuberculosis*. Am J Vet Res, 2005. **66**(4): p. 721-6.
- Valeeva, N.I., et al., *Improving food safety within the dairy chain: an application of conjoint analysis*. J Dairy Sci, 2005. **88**(4): p. 1601-12.
- Salem, M., et al., *Studies on Johne's disease in Egyptian cattle*. J Vet Med B Infect Dis Vet Public Health, 2005. **52**(3): p. 134-7.
- Rast, L. and R.J. Whittington, *Longitudinal study of the spread of ovine Johne's disease in a sheep flock in southeastern New South Wales*. Aust Vet J, 2005. **83**(4): p. 227-32.
- Pickup, R.W., et al., *Mycobacterium avium subsp. paratuberculosis in the catchment area and water of the River Taff in South Wales, United Kingdom, and its potential relationship to clustering of Crohn's disease cases in the city of Cardiff*. Appl Environ Microbiol, 2005. **71**(4): p. 2130-9.
- Paustian, M.L., V. Kapur, and J.P. Bannantine, *Comparative genomic hybridizations reveal genetic regions within the Mycobacterium avium complex that are divergent from Mycobacterium avium subsp. paratuberculosis isolates*. J Bacteriol, 2005. **187**(7): p. 2406-15.
- McDonald, W.L., et al., *Heat inactivation of Mycobacterium avium subsp. paratuberculosis in milk*. Appl Environ Microbiol, 2005. **71**(4): p. 1785-9.
- Korzenik, J.R., *Past and current theories of etiology of IBD: toothpaste, worms, and refrigerators*. J Clin Gastroenterol, 2005. **39**(4 Suppl 2): p. S59-65.
- Whan, L., et al., *Development of an IMS-PCR assay for the detection of Mycobacterium avium ssp. paratuberculosis in water*. Lett Appl Microbiol, 2005. **40**(4): p. 269-73.
- Grant, I.R., *Zoonotic potential of Mycobacterium avium ssp. paratuberculosis: the current position*. J Appl Microbiol, 2005. **98**(6): p. 1282-93.



Caption. JDIP EAB meeting group photograph. April 1, 2005. Cargill Genomics Building, St. Paul, MN 55108. Standing from the left; Janet Payeur, John Adams, Vivek Kapur, Bill Hartmann, Adel Talaat, David Kennedy, Scott Wells, Ynte Schukken, and Gerald Gerlach. Seated, from the left, Cindy Wolf, Judy Stabel, Bill Davis, John Bannantine, Mike Carter, Larry Hutchinson, Mark Tizard, and Rachel Surber. Photo Credit: G. Olson, Kapur Lab, UMN