



American Association of Veterinary Immunologists

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Message from the AAVI President Carol Chitko-McKown



It is hard to believe that my tenure as President of AAVI will soon be over! The year, with all of its highs and lows, seems to have jetted by at super-sonic speed. 2013 was definitely a year of change, hopefully for the better. More positive changes are looming for 2014. I ask that you read the section of this newsletter outlining proposed changes to the AAVI Constitution. We are trying to make our society more “e-friendly” and by doing so seek to change some of the time guidelines for communications that were put in place back in the days of “snail mail” versus email. One of the most important changes is the separation of the Secretary-Treasurer position into two positions. These offices require a longer commitment of time than any of the

other offices in our association and the responsibilities have become too great for any one person. We will officially vote on these topics during our annual lunch meeting (12/9/2013) held during CRWAD. This year we will meet at Weber Grill, located on Grand Ave. between Michigan Ave. and State St. – about 3 blocks west of the Marriott. Additionally, please check out the ballot for this year’s election of officers. It’s also not too soon to start considering who you would like to nominate in 2014. Remember, self-nominations are welcome!

Some changes that have already taken place include our switch to web host iPage. After some security issues, our Webmaster Kevin Lahmers got the site up and running. It continues to be found at <http://theAAVI.org>. Congratulations go out to Dr. Lahmers in his new position of Associate Professor in the Department of Biomedical Sciences & Pathology at the Virginia-Maryland Regional College of Veterinary Medicine! If you need to contact Kevin, he can be reached at klahmers@vt.edu. Our new site continues to take shape under web designer Kelsi Bradley. We are hoping to launch the new site by the end of 2013. Furthermore, electronic dues paying will now be performed through PayPal. This switch will be more convenient since PayPal is a well-known portal, and we will be charged less per transaction.

AAVI continues to receive the support of AAI and for this we are truly thankful. Once again

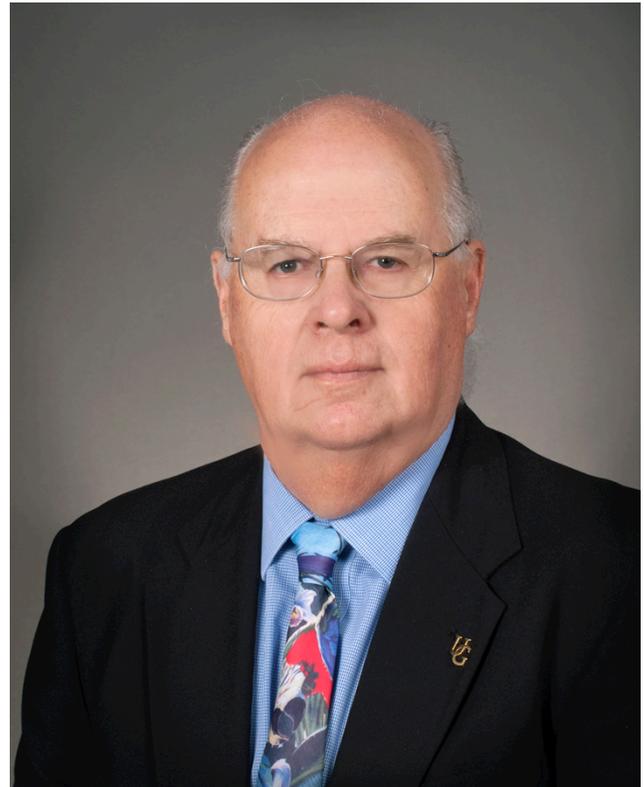
they will be sponsoring our Distinguished Veterinary Immunologist Award as well as our Student Presentation Awards. In our last newsletter, we failed to mention that AAI sponsored the 2012 DVI Award presented to Dr. Michael Murtaugh, and for that we apologize. The recipient of the 2013 AAVI Distinguished Veterinary Immunologist is Dr. Ian Tizard. He will receive this honor during the CRWAD meeting in December. AAVI President-Elect, Susan Eicher, Co-Chair at the AAVI/AAI-VIC Joint Symposium at the 100th annual AAI meeting in Honolulu, Hawaii provides a description of the meeting in this issue of the newsletter. I am currently working with Laurel Gershwin, AAI-VIC Chair (and AAVI Board Member), on the program for the AAVI/AAI-VIC Symposium to be held in Pittsburgh at Immunology 2014. The symposium will be focusing on vaccination strategies; speakers/topics will be included in the first AAVI newsletter of 2014. In addition to the AAVI/AAI-VIC Symposium, the AAVI also hosts a Mini Immunology Symposium at CRWAD. This year's mini-symposium is being organized by AAVI Vice-President Crystal Loving and will also focus on vaccinology.

The AAVI was very successful in maintaining grant funding in order to provide travel grants for outstanding young scientists to meetings such as the 10th International Veterinary Immunology Symposium held in Milan, Italy. Laura Miller has done a wonderful job as the Chair of the Awards Committee, and I urge you to read her report of this year's award recipients.

It has been my honor to serve as the AAVI President this year, but I could not have performed my duties without the help of all of the other officers and members of our organization. Congratulations to incoming President Susan Eicher – I look forward to continuing to work with you! Congratulations to soon-to-be officers or board members after our election - being involved in AAVI is a truly rewarding experience, and I hope to welcome more new members into the fold. I especially encourage young scientists, be they grad students or junior faculty, to introduce yourselves to the

officers and offer your services to AAVI. I look forward to meeting you in Chicago in December!

2013 Distinguished Veterinary Immunologist Awarded to: Dr. Ian Tizard



This award is sponsored by The American Association of Immunologists (AAI).

Ian Tizard received his B.V.M. & S. and B. Sc. (Honours) from the University of Edinburgh, and his Ph.D. from the University of Cambridge. He was a Post-Doctoral Fellow at the University of Guelph where he was later hired as an Assistant Professor, and subsequently promoted to Associate Professor, and Professor. He then relocated to Texas A&M University where he became Professor and Head of the Department of Veterinary Microbiology and Pathology. In 1999, he became the Richard M. Schubot Professor of Exotic Bird Health – a position he still holds. Dr. Tizard's research has covered the depth and breadth of veterinary immunology including but not limited to macrophage

cytophlyic antibodies in mice, phagocytosis, immunoparasitology, autoimmunity, dendritic cells, diagnostic test development, feline leukemia virus, avian immunology, and immunomodulation. Dr. Tizard is the author or co-author of over 145 research papers and numerous book chapters. However, he may be most recognized by his textbook *An Introduction to Veterinary Immunology* that is now in its 9th edition and has been translated into numerous languages. He has been Major Professor of 16 graduate students, and served on the committees of approximately 45 more. He has won numerous national and international awards for his research and teaching including a Special Award for “Distinguished Contributions to Veterinary Immunology” from AAVI, and the first “Outstanding Veterinary Microbiologist Award” from the ACVM. He is a member of numerous scientific, veterinary, avian, and immunology societies for which he frequently serves on committees. Ian will present the immunology keynote address “The emerging role of the intestinal microbiota in regulating almost anything!” Please join us for Dr. Tizard’s invited lecture Monday, December 9th at 1:30 pm in Salon F/G/H.

AAVI By-Laws and Constitution: Proposed Changes

By Paul Coussens

In accordance with the AAVI Board and as discussed at the membership meeting in December 2012, there are proposed changes in the By-Laws and Constitution. If approved, these changes will allow electronic voting and communication between the board and membership and will separate the positions of Secretary and Treasurer. In addition, the duties of each officer are clearly spelled out in the revised document. Although the majority of proposed changes occur on pages 3-5 of the revised document, the separation of Secretary and Treasurer necessitated smaller changes throughout the document. The AAVI Board has reviewed and approved these changes. In accordance with AAVI By-Laws and Constitution, the membership must now review

and approve the changes at the annual meeting this December. The AAVI board encourages comments from the membership prior to that meeting. The proposed changes can be viewed on the AAVI website using the following link: <http://www.theaavi.org/constitution.htm>

AAVI/AAI-VIC Joint Symposium at Immunology 2013

By Susan Eicher

The AAI-VIC/AAVI symposium at the AAI meeting in Honolulu on May 6, 2013 was well received. The topic of the symposium was Natural Animal Models of Human Disease and co-chaired by Simon Barratt-Boyes and Susan Eicher. Because traditional rodent models often do not recapitulate human disease, and performing research directly in humans presents its own set of practical limitations and ethical concerns, research in nonhuman primates and domestic animal species may fill this void and provide major advances in our understanding of diseases of both humans and animals. This symposium illustrated the value of a range of natural animal models of human infectious and immunologic diseases. Dr. Wendy Brown, Department of Veterinary Microbiology and Pathology, Washington State University, discussed the path of her research on “*Dysregulated T cell responses induced by a persistent bacterial pathogen of cattle*”. Dr. Brown used cattle as a model to demonstrate why unraveling this problem is a difficult task. Dr. Guido Silvestri, from Yerkes National Primate Research Center, Emory University School of Medicine presented “*Understanding AIDS by studying natural SIV infections*”. Dr. Guido showed the benefit of studying natural SIV infections to understand human AIDS. Dr. Daniel R. Perez, University of Maryland, presented “*Of men, pigs, birds, and...flu*” showing the ability of flu to pass among species. Dr. Perez presented pigs as the “mixing vessel” for influenza and the possibility of reverse zoonosis. Dr. Carol Reinero, University of Missouri College of Veterinary Medicine, spoke on “*What spontaneous and experimental feline asthma can teach us about human asthma*”. She

convinced many of us that the cat might be a very good model to study the development and treatment of asthma, since cats frequently reflect asthma that is seen in the humans of the same household. Each of the presentations generated discussions that continued beyond the session.

2013 AAVI Student Presentation Competition at CRWAD 2013

By Laura Miller, Chair, AAVI Awards Committee

The 2013 AAVI Student Presentation Competition will again be sponsored by AAI during the 94th annual meeting of CRWAD, December 8-10, in Chicago, Illinois. Oral and poster presentation categories will be judged. **Please note: entry into the AAVI Student Presentation Competition at CRWAD requires the student and/or mentor to be an AAVI member in good standing (as defined by dues paid in the last 3 years).**

The first, second and third place presenters in both categories will be announced at the awards ceremony at the end of the meeting – if at all possible please attend and be recognized. Awards for the best student oral presentations will be \$500, \$250 and \$100 and for poster presentation \$350, \$150 and \$75 for first, second and third place respectively. All awardees will be offered AAVI and AAI membership.

Judges Needed for Student Presentation Competition

PIs: If you would like to contribute as a judge on the AAVI student awards committee at CRWAD over oral or poster presentations please contact me (Laura.Miller@ARS.USDA.GOV). At least three judges are assigned to judge each contestant, and the three presentations in each category earning the highest overall scores capture the awards.

Oral Presentation Judging Criteria

Impact of research - 10 points

- The student clearly presented the importance of research problem and/or disease conditions being addressed.

Abstract - 25 points

- The abstract was well written.
- The abstract clearly reflected the research presented.
- The abstract had a clearly defined conclusion.

Actual data - 40 points

- The experimental design, procedures and methods were clearly stated.
- The quality and quantity of the experiments was appropriate.
- Appropriate controls and statistical methods were utilized.
- Conclusions were reflective of the data presented.

Presentation – 25 points

- The presentation was well organized and clearly delivered.
 - There was adequate/ordered introduction, results and conclusions.
 - All the figure and tables clearly explained.
- The slide presentation was of high quality
 - Figures and tables easy for the audience to interpret.
 - Slides were easily read at the back of the large presentation rooms.
- The amount of information presented was appropriate
 - Too few or too many slides?
 - Too much text?
- Student used good public speaking technique.
- Presentation was delivered in the allocated time.
 - Generally 10 – 12 minutes.
 - There was adequate time for questions.
- Responses to questions demonstrated the student's ability to defend the work.

Poster Presentation Judging Criteria

Impact of research - 10 points

- The student clearly presented the importance of research problem and/or disease conditions being addressed.

Abstract - 25 points

- The abstract was well written.
- The abstract clearly reflected the research presented.
- The abstract had a clearly defined conclusion.

Actual data - 40 points

- The experimental design, procedures and methods were clearly stated.
- The quality and quantity of the experiments was appropriate.
- Appropriate controls and statistical methods were utilized.
- Conclusions were reflective of the data presented.

Presentation – 25 points

- The presentation was well organized.
 - There was adequate/ordered introduction, results and conclusions such that the reader could understand the poster in the absence of the presenter.
 - If asked, the student made a short presentation utilizing the poster.
- The poster presentation was of high quality
 - In the absence of the student, the reader could interpret figures and tables.
 - The poster was easily read from 3 feet away.
 - Appealing presentation.
- The amount of information presented was appropriate
 - Too few or too many panels?
 - Too much text?
- Responses to questions demonstrated the student's ability to defend the work.

Some helpful hints for contestants:

The judges really do keep track of time – it's much better to be a little under and have time for questions than to be over and not have time for

any. Be sure your lab-mates and advisors sit in while you practice – they will be able to catch errors on your slides/posters, and can suggest sections where you might need better explanations. Can your colleagues read your slides/poster? If they can't, the judges sure can't! Too much information on a poster really can be a bad thing. We know you've done a great deal of work, but some of it may just have to wait for another occasion to show off. Sometimes, less IS more! Dress for success – this is a professional meeting and is your time to shine. And finally, be courteous to everyone in your audience. You may not know who the judge is.

2013 AAVI travel awards

By Laura Miller, Chair, AAVI Awards Committee

Immunology 2013

The American Association of Immunologists Annual Meeting (IMMUNOLOGY2013) was held May 3-7, 2013 in Honolulu, Hawaii. The winners of \$1000 Junior Scientist Travel Stipends for IMMUNOLOGY 2013, celebrating 100 years, were:

- Jessica Switzenberg, Ph.D. Student, Michigan State University to present "Transcriptomic studies of *Mycobacterium avium* subsp. *paratuberculosis* infected monocyte-derived macrophages from individual dairy cows"
- Jonathan Roussey, Ph.D. Student, Michigan State University to present "Investigating regulatory T cell responses to MAP antigen stimulation using a monocyte-derived macrophage antigen presentation system"
- Lakshmi Sunkara, Postdoctoral Research Associate, Oklahoma State University to present "Role of histone acetylation, cAMP signaling, and mitogen-activated protein kinase pathways in butyrate-induced host defense peptide gene expression in chicken HD11 macrophage cells"
- Mahmoud Darweesh, Graduate Research Assistant, South Dakota State University to present "Bovine Natural Killer Cells are infected by BVDV and the Infection Results

- in Changes in Phenotype and Activation Markers”
- Nicole Behrens, Ph.D. Student, University of California-Davis to present “Study of the inverse correlation between the level of T regulatory cells and IgE during a type 1 hypersensitivity reaction in the equine model”
 - Renukaradhya Gourapura, DVM, PhD; Assistant Professor, Ohio State University to present "Natural killer T cell adjuvanted inactivated swine influenza virus vaccine enhanced the viral load and suppressed the host immune response to pandemic 2009 H1N1 virus in pigs"

International Veterinary Immunology Symposium 2013

The 10th International Veterinary Immunology Symposium (IVIS) was held August 28-September 1st, 2013 in Milan, Italy. The winners of \$2000 Junior Scientist Travel Stipends for IVIS 2013 were:

- Eveline D. de Geus, Post Doc, Dept. of Infectious Diseases and Immunology, Faculty of Veterinary Medicine, University of Utrecht, The Netherlands. "Glycans from avian influenza virus are recognized by chicken dendritic cells and are targets for the humoral immune response in chicken."
- Lasse Eggers Pedersen, Post Doc, The Danish Technical University, National Veterinary Institute of Denmark. "Monitoring expansion of T cell specificities against Foot-and-mouth-disease virus (FMDV) in swine with MHC class I tetramers following a prime/boost vaccination."
- Abid Ali, PhD student, Federal University of Rio Grande do Sul, Porto Alegre, Brazil. "Putative reprotolysin metalloproteases from ticks *Rhipicephalus sanguineus*, *Ixodes persulcatus* and *Rhipicephalus microplus*"

Corporate Sponsors

By R.D. Schultz

We are pleased to continue to have loyal AAVI Corporate Members that provide significant monetary assistance. Although their names change more frequently today than they have in the past, their support is welcome! Merial has been a corporate member for many years and their name hasn't changed but their parent company is now only Sanofi since Merck is no longer a co-owner. However, Merck Animal Health now owns the two former companies, Schering-Plough and Intervet that became one when Schering-Plough bought Intervet that became Merck Animal Health when it bought Schering-Plough/ Intervet. For years, I was unsuccessful in getting Ft. Dodge to become a corporate member. However, when Boehringer Ingelheim (BI) bought Ft. Dodge from Pfizer, they became a corporate member. I don't know if it was the Schultz name that attracted the attention of the German company or the fact that the head of research at BI was one of my students, but they became a corporate member. Pfizer has been a corporate member for a number of years, however, there is no longer a Pfizer Animal Health. It is now Zoetis and I hope they will continue to be an AAVI corporate member. Also, I would encourage all AAVI members to recruit your favorite company to become a corporate member - dues are only \$1,500/year and for that they get the best that AAVI has to offer!

Elections are coming!

AAVI 2013 Ballot

Biographies and statements of intent submitted by candidates follow.

Cast your ballot by November 22, 2013, by emailing it to: pighetti@utk.edu

Vice President (vote for 1):

Laura Miller
 Jerry W. Ritchey

Treasurer (vote for 1):

Glenn Zhang

Board members-at-large (vote for 2):

Renukaradhya (Aradhya) Gourapura
 Radhey Kaushik
 Sheela Ramamoorthy
 Jishu Shi

Nominating Committee members (vote for 2):

Yugendar R. Bommineni
 Chris Chase
 Lesya M. Pinchuk
 James A. Roth
 Linda J. Saif

Statements of intent and biographies below, as submitted by the candidates, in order listed on the ballot.

Vice-President (vote for one)

Laura C. Miller

PhD, Research Microbiologist, Virus and Prion Diseases of Livestock Research Unit, National Animal Disease Center, ARS-USDA, Ames, IA

Bio: I obtained a BSc (Hons) in Biological Sciences: Medical Microbiology at the University of Edinburgh, Scotland, in 1997. My PhD studies on Foot-and-Mouth Disease were conducted at the Institute for Animal Health, Pirbright and awarded by the University of Reading, England in 2001. I led a surveillance and serology diagnostic team during the UK Foot-and-Mouth Disease Epidemic of 2001. I have a broad background in microbiology, viral immunology and functional genomics. As a post-doctorate and then microbiologist at the US Meat Animal Research Center, I carried out gene expression profiling of Porcine Reproductive and Respiratory Syndrome virus infected cells leading to new information on the type I interferon and apoptotic response to infection. At the National Animal Disease Center, as a research microbiologist I lead investigations in immune responses with a particular focus on the host transcriptome response to viral infection. I have been an active member of American Association of Veterinary Immunologists (AAVI) since 2007, judging the AAVI student presentation competition at the CRWAD meeting from 2007 to the present and became AAVI Chair of Student Awards in 2011. I

have chaired the Immunology Section at the Conference for Research Workers in Animal Diseases (CRWAD) since 2001 and was co-organizer for the 2012 AAVI minisymposium: Agricultural Species as Immunological Models in Veterinary and Biomedical Research. I am guest co-editor of a Veterinary Immunology and Immunopathology Special Issue arising from the mini-symposium.

Statement of intent: I am honored to be considered as a candidate for the AAVI Vice-President, and look forward to serving the organization and addressing the vital issue of maintaining a strong board with the vision of growth. Since 2007 I have regularly attended AAVI business meetings held in Chicago along with CRWAD meetings. These meetings provided me the opportunity to personally meet and interact with my Veterinary Immunology colleagues and foster scientific collaborations. I also came to know the missions and mandates of AAVI during these meetings. One of the most important missions of AAVI is to train, inspire and support the young students and scientists in the field of Veterinary Immunology. As Chair of the AAVI Student Awards Committee, I have had the satisfaction of interacting with today's graduate students and young scientists, and been a proponent of mentor-student presentations in the mini-symposium. I believe in order for AAVI to continue to be an innovative and integral coordinator of veterinary immunology research, our goals as a society should include the addition of collaborative research tools such as bioinformatic databases to our toolkit; strengthening liaisons with national and international immunological and "One Health" societies such as we have with the American Association of Immunologists (AAI) to promote common missions and opportunities for interaction at the scientific and policymaking level; and increasing funding lines for Veterinary Immunology Research e.g., by encouraging the development of USDA and NIH co-operative program grants. As Vice-President, I would support all current mandates of AAVI and would continue previous AAVI efforts to better integrate the veterinary and biomedical immunology communities.

Jerry W. Ritchey

DVM, PhD, DACVP, Professor of Pathology, Department of Veterinary Pathobiology, Center for Veterinary Health Sciences, Oklahoma State University, Stillwater, OK

Bio: I completed a DVM degree from Oklahoma State University in 1991 and immediately entered a residency training program in anatomic pathology (completed in 1993) followed by graduate studies at North Carolina State University. In 1996, I was boarded by the American College of Veterinary Pathologists (ACVP) followed by completion of my graduate work (PhD, Immunology) in 1997. My thesis work evaluated pulmonary immune dysfunction in FIV-infected cats as a model for HIV disease under the direction of Dr. Mary B. Tompkins. After training, I began a faculty position within the Department of Veterinary Pathobiology at Oklahoma State University, where I currently serve at the rank of Professor. My research has primarily focused on animal models of infectious diseases, particularly the role of immune responses and cytokine biology in the development of lesions and clinical disease. I have been actively involved in the service and teaching (professional and graduate) mission at my college/university, served and/or chaired grant review panels (USDA, NIH) and have been intimately involved in the educational mission of the ACVP. Lastly, I am the front-man of a faculty rock and roll band (AC/VP) that changes the lyrics to classic rock songs to reinforce concepts in pathology and immunology. The goal is to use the songs in lecture as a unique learning tool to assist with information retention.

Statement of Intent: I intend to promote and support the AAVI by: 1) assisting with review/update of the constitution/bylaws with amendments to the committee structure to better support the AAVI mission, 2) expanding the presence and outreach of the AAVI with other professional organizations (such as ACVP, ACVIM, etc.) that have overlap in veterinary immunology, and 3) assisting with publication of the newsletter and webpage update to support member communication and promote organizational growth.

Treasurer (vote for 1, uncontested)

Guolong “Glenn” Zhang

Associate Professor of Molecular Immunology, Department of Animal Science, Oklahoma State University, Stillwater, OK

Bio: My research interest has been focused on the molecular mechanisms of innate immune recognition and modulation, with an ultimate goal to devise antibiotic-alternative strategies to disease control and prevention. I received a Ph.D. in Immunophysiology from Kansas State University with Dr. Frank Blecha in 1999, where I studied antimicrobial host defense peptides. After completion of a two-year Howard Hughes Medical Institute Postdoctoral Fellowship on Toll-like receptor signaling at Yale Medical School, I joined faculty at Oklahoma State University in 2002 and was promoted to associate professor in 2007. My research program has been continuously supported by the NIH, USDA, and state funding agencies and I have served on the grant review panels for the NIH, USDA, NSF, and US Army. Student mentoring and classroom teaching have been other major sources of enjoyment for me in the past 11 years at Oklahoma State.

Statement of Intent: I have had pleasure of participating regularly in various AAVI scientific programs and business meetings in the CRWAD Conference. Currently I am serving on the Nominating Committee and I enjoy the opportunities of personally meeting and interacting with many fellow veterinary immunologists in the past. If elected, I am willing to serve as Treasurer and help with financial management of the AAVI.

Board members-at-large (vote for 2)

Aradhya Gourapura

Associate Professor, Food Animal Health Research Program (FAHRP), Ohio Agricultural Research and Development Center (OARDC) and Department of Veterinary Preventive Medicine, The Ohio State University.

Bio: I received my DVM (1991) and MS (1994) from Bangalore Veterinary College, India, and PhD (2002) from Indian Institute of Science (IISc), India. During MS and PhD I was trained in the area of viral immunology and development of diagnostics to survey infectious diseases of livestock. I was involved in understanding immune correlates of protection in large and small ruminants vaccinated with genetically engineered recombinant vaccines against Rinderpest (RP) and Pest Des Petitis Ruminants (PPR) viruses. My studies in India were under the mentorship of Dr. M. Rajasekhar, recipient of 2002 OIE Meritorious Award and Dr. M.S. Shaila from IISc. In 2002 I moved to Indiana University School of Medicine for postdoctoral training under the supervision of Dr. Randy R. Brutkiewicz, a leader in natural killer T (NKT) cell biology and viral immunology. During my stay at Indianapolis for five years I was trained in viral and tumor immunology mediated through NKT cells. In 2008 I joined The OSU as an Assistant Professor. I am a member of AAI from 2004 and AAVI from 2008. I served as a Chair of the OARDC, OSU Graduate Student Research Conference for two years (2010 and 2011). Since 2008 I am serving as a representative of The Ohio State NC229 project on detection and control of porcine reproductive and respiratory syndrome virus and emerging viral diseases of swine. Currently, my research interests include understanding mucosal immunology in the respiratory tract of pigs and other food animal species. Specifically, our investigations are related to host-pathogen interaction and pathogenesis, identification of viral immune evasion mechanisms, and development of mucosal vaccines. Currently, we are actively involved in identification of potent mucosal adjuvants and nanotechnology-

based delivery system to develop innovative mucosal vaccines to control infectious and zoonotic diseases of food animals and humans.

Statement of Intent: I will be honored to be an AAVI Board Member if selected to serve the veterinary immunology community. As a member at large my goals are to promote the importance of veterinary immunology to understand efficacy of vaccines in food animal species, advocate veterinary species as a model system to develop better vaccines against important zoonotic diseases. My active involvement with the AAI community since 2002 will help to serve as a liaison with AAVI to promote importance of veterinary immunology.

Radhey Shyam Kaushik

Professor of Microbiology and Immunology, South Dakota State University, Brookings, SD

Bio: I completed my undergraduate and master degrees in Veterinary Sciences from Haryana Agricultural University, India in 1985 and 1988 respectively. I practiced as a field veterinarian in India for six years. In 1994 I was awarded Canadian Commonwealth Scholarship for pursuing a Ph.D. program in ‘Veterinary Microbiology and Immunology’ at Western College of Veterinary Medicine, University of Saskatchewan, Canada. I completed Ph.D. program in 1998 and my Ph.D. research was focused on studying the role of macrophages in African bovine trypanosomiasis. Subsequently I worked as a Post-Doctoral Fellow at ‘Vaccine and Infectious Disease Organization’ (VIDO), Canada and during this tenure my research was mainly focused in the area of mucosal immunity of food animals. In 2003, I joined as an Assistant Professor of Microbiology and Immunology at South Dakota State University (SDSU). Recently in 2013 I have been promoted to the rank of full Professor. One of my assignments at SDSU includes teaching Microbiology and Immunology classes to both undergraduate and graduate students. During last 10 years my research has been mainly focused on studying host-pathogens interactions at mucosal surfaces with special emphasis on innate immunity. I have been working as a Graduate Coordinator and Chair of Dept. Graduate Committee since 2010. I received SDSU ‘Excellence in Graduate Student Mentoring Award’ in 2012. I have also been working as Assistant Dept. Head since 2011. I have served twice on USDA ‘NIFA Animal Health Grant Panel’ and thus I understand the research grant funding mechanisms very well.

Statement of Intent: I have regularly attended CRWAD meetings since 2003. I presided over the CRWAD ‘Immunology section’ in 2011. I chaired ‘Gastroenteric Disease’ section at CRWAD meetings in 2011 and 2012 and will be doing the same in Dec 2013. I have been the active member of American Association of Veterinary Immunologists (AAVI) since 2007 and every year regularly attended AAVI business meetings and lunches. These meetings provided me the opportunity to personally meet and interact with veterinary immunology colleagues and foster the scientific collaborations. I also came to know the missions and mandates of AAVI during these meetings. One of the most important missions of AAVI is to train, inspire and support the young students and scientists in the field of veterinary immunology. Some of the AAVI concerns had been the decreasing AAVI membership and research funding for the veterinary immunology in the USDA and other funding agencies. This may severely affect the future of veterinary immunology research at various levels. It is very important to raise and address these concerns in a timely manner and approach the funding agencies through AAVI. I applaud AAVI efforts in this regard. I have good experience through my earlier and current positions in understanding the graduate students’ and research funding issues and fully appreciate the need of nationally addressing some of the pressing concerns through organizations such as AAVI for the betterment of veterinary immunology profession. I am ready to provide my services and contribution to various missions and mandates of AAVI and present my-self as a candidate for the ‘member-at-large position’ of AAVI.

Sheela Ramamoorthy

Assistant Professor, Department of Veterinary and Microbiological Sciences, North Dakota State University

Bio: I received my Bachelors in Veterinary Medicine (BVSc) from the Madras Veterinary College in India in 1991. After practicing for a couple of years, I worked as an executive in the quality control and development department of a veterinary vaccine manufacturer (Indian Immunologicals Ltd) in India. I moved to the U.S in the year 2000 to obtain a M.S in Microbiology and Molecular Genetics from the Oklahoma State University followed by a PhD in Biomedical Sciences from Virginia Tech in 2006. I completed two years of post-doctoral training with Dr. X. J. Meng at Virginia Tech before accepting a faculty position at the Iowa State University Veterinary Diagnostic laboratory in 2008. Throughout my academic career the primary focus of my research has been veterinary vaccinology; later coupled with diagnostic test development. Despite recent advances in the field the identification and targeting of host immune responses and pathogen associated factors that are critical for eliciting protective immunity remains a challenge. My interest lies in identifying the key mechanisms of protection and translating the findings into novel disease prevention strategies. While I currently use the porcine respiratory disease complex as a mucosal coinfection model to study vaccine mediated immunity my contributions to microbial vaccine immunity spans a wide range of agents including influenza, *Neospora caninum*, *Brucella abortus*, porcine circoviruses, porcine reproductive and respiratory disease syndrome virus and torque teno viruses. I am an active member of several professional veterinary and vaccine related organizations, routinely serve as an ad-hoc reviewer for journals such as Vaccine, Virus Research and Plos One, and serve on ad-hoc panels for NIH and one USDA-NIFA panel.

Statement of intent: My commitment and passion for the field of veterinary vaccinology began in 1994 during the time I spent in the vaccine industry and continues until today. In the last two decades there has been an explosion of information in the fields of molecular and microbial immunology. However, the translation of this information into outcomes that are useful for the veterinary community has been lagging disproportionately. I sincerely believe that AAVI has a vital role to play in bridging this gap as well as shaping the future of the field of veterinary immunology by providing a forum for the exchange of ideas, increasing visibility about the importance of the field to agriculture and policy making. Therefore, I will be honored to serve as a member-at-large to promote AAVI and its goals and to continue to build AAVI into a strong organization.

Jishu Shi

Professor, Director of U.S.-China Center for Animal health, College of Veterinary Medicine, Kansas State University (KSU), Manhattan, Kansas.

Bio: I obtained a bachelor degree from Beijing Agricultural University in 1985 and a MS from the Chinese Academy of Agricultural Sciences (CAAS) in 1988. After working on veterinary medicine research at CAAS for four years, I came to KSU and studied under Dr. Frank Blecha for a PhD in veterinary immunology in 1992. Following a postdoctoral fellowship with Dr. Tomas Ganz at University of California Los Angeles from 1996-1999, I joined Pfizer Animal Health as a research scientist to work on animal vaccine development. In 2000, I moved to Pfizer Global Research and Development division to work on drug development for human inflammatory diseases. In 2003, I joined the college of veterinary medicine, Auburn University as an assistant professor. My research focused on inflammatory diseases in humans and animals. In 2008, I joined the college of veterinary medicine, Kansas State University, as an associate professor with tenure. The focus of my current research is to develop novel adjuvants for vaccines against classical swine fever and porcine reproductive and respiratory syndrome. Since 2010, I have also served as the founding director of U.S.-China Center for Animal Health, a KSU-

based education and extension service organization that promotes animal health education and technology exchange between the U.S. and China.

Statement of Intent: I was trained to become a veterinarian and have been working as a veterinary immunologist in various academia and industry settings in China and the U.S. in the last 28 years. I fully support AAVI's mission for the development, promotion, and dissemination of knowledge in veterinary immunology and its policy that AAVI is open to all veterinary immunologists internationally. To achieve our mission, we need more funding and innovative ways to recognize the impact of research and education efforts by our outstanding AAVI members. I will work with the AAVI Board members to find new ways to enhance funding through my interactions with the animal health industry and increase our international membership.

Nominating Committee (vote for 2)

Yugendar R. Bommineni

Poultry Veterinarian for Virginia Department of Agriculture and consumer services.

Bio: I received both DVM and MVSc degrees from College of Veterinary Medicine, Hyderabad, India. During that time I worked on Bluetongue virus isolation, diagnosis and vaccine development. My clinical experience includes two years poultry industry consultant in India. Afterwards I got my PhD from Oklahoma State University. During my PhD I worked on Host defense peptides (Antimicrobial peptides) to develop novel antimicrobial agents and immunomodulators especially against antimicrobial resistant infections. After graduate school I got Anatomic pathology training from Tulane National Primate Research Center, New Orleans, LA. I got immunology diplomat status with American College of Veterinary Microbiologists (ACVM) in 2009. Later I am also certified in Virology subspecialty in 2012. Currently I am working as Poultry Veterinarian for Virginia Department of Agriculture and consumer services. Before I join here I was the section head of Virology and Immunology at New Mexico State Veterinary Diagnostic Laboratory, Albuquerque, NM. My primary research interests (apart from diagnostics) are *host defense peptides, immunopathology of viral diseases, auto-immunity, hypersensitivity, veterinary biologicals, vaccine development and comparative pathology*. I serve as a consulting Microbiologist for infectious disease diagnosis and vaccine production in India. Currently I am also serving as the examination committee member for ACVM.

Statement of Intent: This would be an honor to be considered for a position within the veterinary immunology community. The activities of AAVI allowed me to interact and network with a wide variety of scientists whose primary interests are related to veterinary immunology. Promote veterinary immunology and integrate this field to relevant biomedical societies is one of the main mission of our society. I would like to support to achieve the goals of the organization in the best possible way. As nominating committee member I would like to work with other colleagues to bring some co-operative grant money to promote the activities of the society. I am very interested to promote clinical immunology in academia and industry. I hope to use my experience to the benefit of AAVI and by serving in nominating committee I would like to identify the candidates who are suitable for various AAVI offices to promote the missions of the organization.

Chris Chase

Professor, Department of Veterinary and Biomedical Sciences, South Dakota State University (SDSU)

Bio: Dr. Chase is a native of Sisseton, SD and attended SDSU. He received his DVM from Iowa State University and MS and Ph.D. from the University of Wisconsin-Madison. He was an associate at the Viborg Veterinary Clinic, Viborg, SD, for 5 years and has continued his involvement in clinical veterinary medicine as a consultant and relief veterinarian in Stoughton, WI, Laramie, WY, and Flandreau, SD until 2009. He is a past president of the South Dakota Veterinary Medical Association and the American Association of Veterinary Immunologists. He is also the President of RTI, a contract research organization that test animal health company vaccines for poultry, swine and cattle.

Statement of Intent: AAVI is an organization that is essential to provide opportunities for scientific programs, travel awards, networking and interaction with AAI. I believe that AAVI is in an excellent position to continue to grow both in membership and influence. The selection of motivated leaders for AAVI is essential. I have served the organization in the past as President, a member of the Board of Directors and a member of the Fundraising Committee. I would be pleased to serve the membership on the Nominating Committee.

Lesya M. Pinchuk

Associate Professor of Immunology, Department of Basic Sciences, College of Veterinary Medicine, Mississippi State University.

Bio: I have been a member of AAVI since 2005 and have served as a USDA Animal Health and Well-Being Virology Panel Member in 2002 and 2003. I have served as a Member on the Board Scientific Reviewers for American Journal of Veterinary Medicine (2007-2012). Currently, I am an *ad hoc* reviewer for National Science Foundation of Canada, Journal of Proteome Research, Journal of General Virology and several journals related to veterinary research in Immunology. My research interests are the molecular mechanisms of cytopathic and noncytopathic BVDV antigen presentation by professional APC, monocytes and dendritic cells using proteomics, genomics and functional approaches. Recently, I presented our research on mitochondrial dysfunction associated with BVDV cytopathogenicity in Milan, Italy (10th IVIS). I am also involved in the clinical research assessing the effects of immunosuppressive drugs in canine T cells-mediated immune responses. I am a course leader for basic and introduction to veterinary immunology in the professional curriculum and an instructor in the graduate and undergraduate immunological courses. Finally, I served as a faculty supervisor and director of the MSU Flow Cytometry Facility. Trainees from my lab are active in various veterinary medicine and immunology careers in academia.

Statement of Intent: Before coming to the CVM at Mississippi State University, my postdoctoral research was in the area of human immunology and genetics including human/primate dendritic cells and their role in the pathogenesis of AIDS. This work resulted in multiple publications in several top immunological journals such as Immunity, Journal of Immunology and others.

I shifted the direction of my research from human immunology to bovine and recently to canine to address the research needs of the College and State that resulted in 24 peer-reviewed manuscripts, 2 invited, per-reviewed book chapters and multiple poster and oral presentation at the national and international veterinary immunology conferences. I have come to appreciate the importance of collaborative research with computational and clinical researchers, training, teaching and advising graduate and veterinary students, medical residents and dual degree DVM/PhD students. I would like to apply all the knowledge and experience I obtained during my postdoctoral training and my current experiences in cellular and molecular immunology, cell biology and computational “omics” approaches in

the future veterinary basic and medical research. In conclusion, I am honored to be considered as a candidate and looking forward to serve on AAVI Nominating Committee.

James A. Roth

Distinguished Professor in the Department of Veterinary Microbiology and Preventive Medicine in the College of Veterinary Medicine at Iowa State University.

Bio: I received the DVM (1975) and PhD (1981) degrees from ISU and am currently the Director of the Center for Food Security and Public Health and the Institute for International Cooperation in Animal Biologics, an OIE Collaborating Center for Diagnosis of Animal Disease and Vaccine Evaluation in the Americas. My primary area of research expertise is immunity to infectious diseases of food producing animals. My research has emphasized characterizing factors that influence neutrophil function and more recently characterizing T cell responses to vaccines. I have been a member of AAVI since it was established.

Statement of Intent: My goal if I am elected to the nominating committee will be to encourage young members of AAVI to get involved in the organization by serving in leadership positions.

Linda J. Saif

Distinguished University Professor, Food Animal Health Research Program (OARDC) and the Veterinary Preventive Medicine Dept (CVM), The Ohio State University.

Bio: I am a virologist and immunologist whose research focuses on mucosal immunity and comparative aspects of enteric and respiratory viral infections (coronaviruses, rotaviruses and caliciviruses) of food animals and humans. I also study vaccine development and the impact of malnutrition and micronutrient deficiencies on vaccines, and interactions of probiotics and the gut microflora with the neonatal immune system. Our discovery of the gut-mammary secretory IgA axis (first description of the common mucosal immune system) in swine allowed us to exploit this concept to develop a maternal oral porcine coronavirus (TGEV) vaccine to protect neonatal pigs. Current research emphasizes novel bioengineered virus-like particle (VLP) vaccines and adjuvants (vitamin A, probiotics) to prevent viral diarrheas in humans and animals and their evaluation in germfree animal disease models. Our lab also discovered new enteric viruses (group C rotavirus, caliciviruses) and developed novel cultivation methods, diagnostic assays and vaccines for them. We also investigate the interrelationships among animal viruses and their human counterparts to assess their zoonotic potential and mechanisms of interspecies transmission. I am an elected member of the U.S. National Academy of Sciences and the Argentine Academia Nacional de Agronomía y Veterinaria and an elected Fellow of the American College of Veterinary Microbiologists, the AAAS and the American Academy of Microbiology. I have served as a member of advisory teams for various organizations (USAID, CDC, WHO, etc.) and serve on several journal editorial boards (including PNAS). My laboratory serves as a WHO International Reference Lab for Animal Coronaviruses within the SARS Coronavirus Network and as an International Reference Lab for TGEV porcine coronavirus for the Office International des Epizooties, Paris, France.

Statement of Intent: I have been a long-term member of the AAVI and I am also a member of AAI. I would welcome the opportunity to serve on the AAVI nominating committee to advance the mission of AAVI and to promote veterinary immunology.

Upcoming Meeting Announcements

Autumn Immunology Conference

November 22-25, 2013, Chicago, IL

<http://www.autumnimmunology.org/>

Conference for Research Workers in Animal Diseases (CRWAD),

December 8-10, 2013, Chicago Marriott Downtown Magnificent Mile.

Distinguished Veterinary Immunologist Lecture: Dr. Ian Tizard

<http://www.cvmbs.colostate.edu/mip/crwad/index.htm>

CRWAD 2013 Immunology Session Presiders Needed

Laura Miller, 2013 CRWAD Immunology Section chair, is seeking presiders for the Immunology talks during CRWAD. We are particularly keen for research associates, post-doctorates and new AAVI members to take advantage of this opportunity. Please contact Laura (Laura.Miller@ARS.USDA.GOV) if you are willing to preside over an immunology session at this year's CRWAD meeting.

CRWAD AAVI Mini-Symposium:

Vaccine Design - Targeting the Immune System

By Crystal Loving

Many of us work in veterinary immunology in the context of an infectious disease with the ultimate goal of understanding the host response to devise disease prevention or mitigation strategies. Under this guise is vaccine development, and for veterinary vaccines a shotgun strategy is often the first approach. However, this method frequently fails or provides only limited protection. Consideration of the immune system is critical to vaccine success and this symposium was designed to bring attention to specific research in the field.

Please join us on Monday, December 9th, beginning at 8:00 AM, in Salons F/G/H.

Confirmed speakers include:

- **Dr. Anne De Groot** – University of Rhode Island, iCubed; Co-founder of EpiVax. From genome to vaccine using the iVax toolkit: epitope driven vaccine design and development for humans and animals.
- **Andres Gutierrez** – University of Rhode Island, iCubed. Immunoinformatics approach to design influenza genome-derived T cell epitope-based vaccines for swine.
- **Dr. Philip Griebel** – VIDO-InterVac, University of Saskatchewan. Neonatal vaccination: working with maternal immunity.
- **Dr. Patricia Gonzalez-Cano** – VIDO-InterVac, University of Saskatchewan. Uptake of lambda phage by the mucosal immune system.
- **Dr. David Suarez** – USDA-ARS - Southeast Poultry Research Laboratory. Passive antibody transfer in chickens to model maternal antibody after avian influenza vaccination.

AAVI/AAI-VIC Joint Symposium at Immunology 2014

May 2-6, 2014 in Pittsburgh, Pennsylvania.

<http://www.immunology2014.org>

The topic selected is “Vaccines”. As we plan this symposium we aim to make the AAVI fall symposium at CRWAD complimentary on this topic. Watch for further announcements in the next newsletter.

AAVI Officers and Board - 2013

President: Carol Chitko-McKown, USDA-ARS, Carol.Chitkomckown@ars.usda.gov

President Elect: Susan Eicher, USDA-ARS, Susan.Eicher@ars.usda.gov

Vice President: Crystal Loving, USDA-ARS, Crystal.Loving@ars.usda.gov.

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Members-at-Large:

Lorraine Sordillo (2013), Michigan State University, sordillo@msu.edu

Matt Sylte (2014), University of Georgia, msylte@uga.edu

Laurel Gershwin (2015), UC Davis, lgershwin@ucdavis.edu

Philip Griebel (2016), U. of Saskatchewan, Saskatoon, Saskatchewan, Canada

Nomination Committee (Elected by membership)

Susan Lamont (2013), Iowa State University, sjlamont@iastate.edu

Amerlia Woolums (2013), University of Georgia, awoolums@usg.edu

Andreas Contreras (2014), Michigan State University, contrera@cvm.msu.edu

Glenn Zhang (2014), Oklahoma State University, Glenn.Zhang@OKstate.edu

Paige Adams (2015), U. of Texas Medical Branch, Galveston. apadams@utmb.edu

Alan Young (2015) South Dakota State University, Brookings, Alan.Young@sdstate.edu

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