

American Association of Veterinary Immunologists

Newsletter

Winter 2022



2022 Board

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A Brief Message from AAVI President: Jodi McGill

Dear AAVI members:

Happy New Year! I hope the holidays were a welcome break for all of you. As I write this, it is minus 9° F outside! I am thinking of our chilly livestock and their caretakers; and our very cold students, making the trek across campus this morning.

I am honored to serve as your AAVI President for 2022! I am looking forward to all that this year brings. One of my goals for 2022 is to offer more opportunities for member engagement this year, particularly amongst our youngest colleagues. Our trainees have lost many networking opportunities due to the COVID-19 pandemic, and the need is greater than ever for them to feel connected to each other and to the veterinary immunology community. We have all become experts at the virtual meeting, and I am looking forward to planning some virtual networking opportunities over the coming year. Some possibilities I'm considering include trainee work in progress sessions, career round tables, or perhaps some informal coffee sessions with our senior members. Please watch for additional information in your inbox as I move forward with event planning. If you have ideas or are interested in participating, please send me a note!

I had the pleasure of attending the 2021 CRWAD meeting this past year. Although we were a smaller group than normal, the joy at gathering in-person again was palpable! It was wonderful to see so many colleagues and trainees engaging and sharing their science. I had the honor of chatting at length with our 2021 DVI, Dr. Gary Entrican. He is truly one of the kindest and most inspiring people I have ever met. I was also blown away by our symposium speakers, which included Dr. Entrican and Drs. Hanah Georges, John Harding, Heather Wilson, and Angela Arena-Gamboa. Truly excellent talks by all and I learned a LOT!

Send in your photos!



If you have any photos from the last year from meetings, award ceremonies, lab silliness, animals, and others, please send them to Jodi McGill at jlmcgill@iastate.edu.

The Annual AAVI Board Meeting was held during CRWAD, and we passed the torch to our newest members of the Executive Board. Welcome to our new Treasurer, Dr. Angel Abuelo from Michigan State University and our new Vice President, Dr. Leela Noronha from the USDA Arthropod-Borne Animal Diseases Research Unit! Welcome also to our new Member At Large, Dr. Paige Adams from Kansas State University Olathe, and our newest member of the Nominations Committee, Dr. Ignavio Correias from Zoetis. These are important jobs, and we appreciate these individuals for their willingness to serve. I also want to extend a hearty thank-you to our past board members for their time and service to our organization. In particular, thanks to Dr. Yongming (Simon) Sang for his 3-year service as Treasurer! That is an important and time-consuming position. Thank you also to Dr. Randy Sacco for his service as 2021 President! He did an excellent job of navigating another challenging year of COVID. All of our board members spend many hours throughout the year in service to our organization and I really appreciate these efforts.

At the December meeting, the board made the decision to employ Dr. Addie Boettcher once again as our webpage and newsletter editor. She has done an excellent job updating our website and giving our newsletter a facelift this past year. We are grateful for her help again in 2022. Thank you, Addie, for your time and talents!

I'm looking forward to attending the upcoming AAI meeting in Portland, Oregon in May! AAVI members Dr. Aradhya Gourapura and Dr. Janice Telfer will be hosting the AAI-VIC symposium focusing on Immunomodulation and Immunotherapy. See the details later in the newsletter. I hope to see many AAVI members in Portland! Please be sure to share details with the AAVI

if you are hosting or attending any other Immunology meetings in the coming year! Email me or any of the board members. We are eager to shine a spotlight on the activities of our members and community!

Stay warm out there!
Jodi

Secretary's Note

Heather Wilson, Secretary

Thank you very much to everyone who attended the AAVI Luncheon at the Grand Lux Hotel in Chicago in December. We had over 25 people in attendance which is terrific in a COVID year. As you know, the CRWAD meeting will take place in January 2023 so the AAVI luncheon will take place on Monday, January 23, 2023. We will arrange it so that payment for the luncheon and possibly payment for CRWAD memberships will take place via the CRWAD registration portal. Changing this timing will allow for a single time of year to collect all the fees. If people are not attending CRWAD but still want to pay their AAVI membership, we will set that up through the PayPal portal. Stay tuned! I'm happy to report that we have 121 active members.

Please know that the CRWAD schedule is returning to a rotating schedule. Our DVI and invited speakers have been held on the Monday afternoon time slot for the past several years but I believe it is being moved forward to the Tuesday morning time slot in Jan 2023 (you will be updated when we get closer to the next meeting). In 2024, we will be moved to Sunday morning, etc. Please plan your stay accordingly.

Best regards,

Heather L. Wilson

CRWAD 2021 Highlights

2021 Distinguished Veterinary Immunologist

Dr. Gary Entrican was the 2021 AAVI DVI. Pictured here is Dr. Entrican receiving his award with 2022 AAVI President, Dr. Jodi McGill.



AAVI 2021 Mini-Symposium Presenters

Reproductive Immunology and Host-Pathogen Interactions during Pregnancy

Dr. Gary Entrican, University of Edinburgh
Applying Knowledge of Immunological Correlates to Vaccine Design for Prevention of Chlamydial Abortion

Dr. Hanah Georges, Colorado State University
A Molecular Perspective on the Development of Fetal Immunotolerance to BVDV

Dr. John Harding, University of Saskatchewan
Host Responses Following Third Trimester Maternal PRRSV2 Infection

Dr. Heather Wilson, University of Saskatchewan
Intrauterine Immunization During Breeding

Dr. Angela Arena-Gamboa, Texas A&M University
Brucellosis and Reproductive Disease: A Current Update

Save the date for CRWAD 2023

January 20-24, 2023

CRWAD is transitioning to holding meetings in January instead of December. There will be no conference in calendar year 2022.

Congratulations to the 2021 CRWAD Fellows!

CRWAD Fellows are scientists who have made sustained and notable contributions to CRWAD through service or participation in the CRWAD organization and annual meetings.

See https://crwad.org/fellows_directory/ for additional information and biographies of the 2021 fellows!

- ◆ Cynthia Baldwin, PhD
- ◆ Yung-Fu Chang, DVM, MS, PhD
- ◆ Norman Cheville, DVM, MS, PhD
- ◆ Lynette Bundy Corbeil, DVM, PhD
- ◆ Roy Curtiss, III, PhD
- ◆ William C. Davis, PhD
- ◆ Roman Reddy Ganta, PhD
- ◆ Ian Gardner, BVSC, MPVM, PhD
- ◆ Laura Hungerford, DVM, MPH, PhD, CPH, FNAP
- ◆ Jun Lin, PhD
- ◆ Tg Nagaraja, BVSC, MVSC, PhD
- ◆ Stuart W. J. Reid, CME, BVMS, PhD, DVM
- ◆ Richard F. Ross, DVM, MS, PhD
- ◆ Linda J. Saif, PhD
- ◆ Y. M. Saif, DVM, PhD
- ◆ Jan M. Sargeant, DVM, MSC, PhD, FCAHS
- ◆ Lorraine Sordillo-Gandy, PhD

CRWAD 2021 Highlights

Congratulations to the Oral and Poster Presentation Award Winners!

Oral Presentation Winners:

1st Elisabeth Larson;
Cornell University

Peripheral IgE+ plasmablasts secrete IgE and correlate to allergic disease severity



2nd Jayne Wiarda;
Iowa State University

Porcine innate lymphoid and T cells differ from circulating populations – novel findings via single-cell RNAseq



3rd Darling Melany de Carvalho Madrid;
University of Florida

Combination of antiviral therapies in the control of influenza infection in pigs



Poster Presentations Winners:

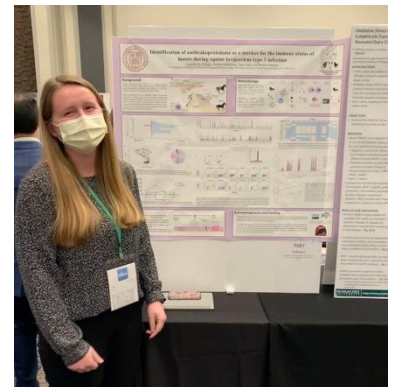
1st Alisa Herbst;
University of Kentucky

Pro-inflammatory cytokine responses to bacteria antigen LPS differ between young adult and old horses in vitro



2nd Camille Holmes;
Cornell University

Identification of antileukoproteinase as a marker for the immune status of horses during equine herpesvirus type 1 infection



3rd Bryan Tegner Jacobson; Montana State University

Impact of Mycoplasma ovipneumoniae on the phagocytic ability of alveolar macrophages

(Also pictured is Dr. Aradhya Gourapoura from the Ohio State University.



In Memory of Lorraine Marie Sordillo

November 5, 1959-September 10, 2021

By Angel Abuelo, Carsten Walker, and Isis Kanevsky

Last September we lost one of our beloved AAVI members. Dr. Sordillo passed away after a year-long fight with metastatic breast cancer. Lorraine was born November 5, 1959 in Winchester, Massachusetts, the daughter of Howard and Jacquelyn Neill. Lorraine was raised in Malden, Massachusetts, where she developed her love of animals. She obtained her B.S. and M.S. degrees from the University of Amherst at Amherst Mass and a Ph.D. in lactation physiology from the Louisiana State University. Her career first took her to Knoxville, Tennessee, where she completed her post-doctoral research. After that, she began work in the immunology group of the Veterinary Infectious Disease Organization (VIDO) in Saskatoon, Saskatchewan, Canada. A 12-year stay at Penn State University followed where she rose from assistant to full professor. From there, she moved to Michigan State University to become the inaugural Meadow Brook Chair in Farm Animal Health and Well-being in the college of veterinary medicine. She is survived by her husband of 35 years, Jeff Gandy; daughter, Candice Gandy; mother, Jacquelyn Neill; sister, Janice Neill; brothers, John, Michael, and Jim (Joanne) Sordillo; and numerous nieces, nephews, and extended family. She was preceded in death by her father, Howard Neill.

A Distinguished Career Full of Accomplishments

Lorraine established a highly productive research program of national and international standing in bovine nutritional immunobiology. Her research focuses on understanding and modulating mechanisms that compromise host defenses during the periparturient period and increase susceptibility to economically



important diseases, such as mastitis. Her work contributes to strategies that enhance cows' immunity through nutrition, which reduce economic losses associated with treatment costs and decreased production. Additionally, her work improves animal health and reduces antimicrobial usage on farms, both of which are of utmost importance for sustainability of the dairy industry and its societal contract.

The impact of her internationally recognized research program is demonstrated in several measures. Her peer-reviewed publication record was extraordinary, with over 180 documents (60 in the last five years) in high-quality journals (e.g. 30% of publications in J Dairy Sci, 10% in Vet Immun Immunopath). These papers have been robustly cited by peers, achieving a total of 6,055 citations (2,812 in the 2016-21 period) and an overall h-index of 40 (based on Scopus). During her career, Prof. Sordillo garnered more than \$15 million in funds as PI or co-PI from industry and various federal funding agencies. Only in the last 7 years, she received more than \$8.3 million in research support just from the USDA. Her research program also resulted in 4 patents aimed at mastitis therapy and control. Additional evidence of the impact of Lorraine's research and her worldwide recognition and standing as a bovine researcher included her active role in numerous journals' editorial boards, membership and chairpersonship of grant review panels, and regular invitations to speak at national and international scientific conferences. Notably, in the last five years, she has presented a total of 28 invited seminars. She also received

numerous awards for her research contributions, including the AAVI Distinguished Immunologist Award and the Zoetis Physiology Award from the American Dairy Science Association (ADSA). She was also inducted in the inaugural cohort of Fellows of the Conference of Research Workers in Animal Diseases (CRWAD).

Prof. Sordillo's contributions and international standing as an immunologist are also reflected in her commitment to the training and mentoring of other researchers. Throughout her career, Prof. Sordillo has directly mentored a total of 33 graduate students (18 M.S. and 15 Ph.D.), 10 postdoctoral associates, and hosted numerous visiting scientists; all of whom made a successful career transition into industry, government, or academia under her mentorship. She has also been a strong mentor for many junior faculty both inside and outside her department. Lorraine had an inspiring passion, enthusiasm, and commitment to high-quality research. Her mentees have frequently been among the regular recipients of student awards at the CRWAD or ADSA.

Dr. Sordillo made significant contributions to animal health through participation in professional organizations. Among others, she was active in highly relevant associations, such as CRWAD, ADSA, and the National Mastitis Council. She also served in multiple roles of the AAVI Board, including President in 2005-06. Known as a thoughtful and dependable member on steering and organization committees, her contributions were always highly valued by her peers. Lorraine was a remarkable, natural leader. She also served in numerous roles for USDA NIFA and played a key role in making integrating the annual PD meeting of the "Diseases of Agricultural Animals" program with CRWAD.

Person and Mentor Extraordinaire!

Carsten Walker (current PhD Candidate): During the last three and a half years, I was fortunate enough to grow as a scientist and person under Dr. Sordillo's guidance. She was a tough, but fair mentor, pushing us to perform at our best. Her

dedication to research and her students was evident to all, mentoring us until her last days.

To many she was "the boss", but Lorraine was an incredibly caring and passionate person. She appreciated directness and honesty, not only relating to science, but also personal struggles. She cared about our wellbeing as much as our progress in the lab.

I am grateful to have known Dr. Lorraine Sordillo and even more so for everything she did for myself and countless others. Her selflessness and dedication provided her students with the foundation to now carry on her legacy.

Isis Kanevsky (former PhD Candidate): Dr. Lorraine Sordillo-Gandy was a mentor that took immense pride in every student trained and every scientist working in her lab. Over the years, experiences of students ranged to encompass many highs and lows. Many times there was stress, teaching moments, tempers flying high, and timelines being met. But always there was laughter, great food, and fun. Always there was close supervision by the boss, discussions of every experimental design, reminders of the critical role of proper controls. To earn a PhD with Lorraine was to learn how to take on any scientific problem and design appropriate, hypothesis driven, experiments. Graduate students were drilled interpreting results with a keen eye to experimental artifacts and to always be in search of the mechanism. The diversity of positions which her former graduate students, post docs, technicians, etc. hold and excel in truly speaks to the depth of training by the Boss. Dr. Lorraine Sordillo-Gandy will continue to impact our field not only through publications, but also through the contagious dedication to science she taught us all. But mostly she will impact us through joyful memories of an amazing woman, scientist, and friend...

Angel Abuelo (faculty mentee): It is extremely hard to synthesize in words the impact that Dr. Sordillo had in both my professional and personal life. She was the one to convince to apply for my current position at the Michigan State College of Veterinary Medicine. After joining the faculty, she was a tireless mentor and

supporter to me. Lorraine was extremely dedicated to all her graduate students and mentees. She had this ability of effortlessly lifting everyone around her, always encouraging everyone to do their very best. She became my role model in many fronts, but particularly regarding the training of new scientists. Often, I found myself thinking "what would have Lorraine done?". Beyond work, Lorraine was always fun to be around. We lost not only an outstanding scientist, but an extraordinary human being. But she will never be forgotten and will forever remain in our hearts.

Upcoming Symposia

AAI 2022; Portland, Oregon

Immunomodulation and Immunotherapy:
Lessons to Improve Health

Saturday, May 7, 2022 12:30-2:30 PM

Chairs

Dr. Janice C. Telfer

University of Massachusetts, Amherst

Dr. Renukaradhya J. Gourapura

*The Ohio State University College of Food
Agriculture and Environmental Science*

Speakers

Dr. Jacques Robert, University of Rochester
Medical Center

*Xenopus as a nonmammalian experimental
organism for investigating host interactions
with non-TB mycobacteria*

Dr. Alix K. Berglund, North Carolina State
University, College of Veterinary Medicine

*Immunomodulation by mesenchymal stem
cells: mechanisms, clinical implications, and
future directions*

Dr. Duncan Mwangi, Zoetis

*Immunomodulation and immunotherapy: a
dawn of novel therapies in animal health*

Dr. Renukaradhya J. Gourapura, The Ohio
State University College of Food Agriculture
and Environmental Science

*Nature of vaccine delivery vehicle determines
the Th1- and Th2- based immunity to intranasal
influenza vaccine in a pig model*

AAI 2022

May 6-10, 2022
(immunology2022.org)

Portland, Oregon
Oregon Convention Center



AAVI Officers and Board – 2022

Executive Board

President: Jodi McGill, Iowa State University, jlmcgill@iastate.edu

President Elect: Laura Miller, USDA NADC, laura.miller@usda.gov

Vice President: Leela Noronha, USDA ABADRU, leela.noronha@usda.gov

Past President: Randy Sacco, USDA NADC, randy.sacco@usda.gov

Secretary: Heather Wilson, VIDO-University of Saskatchewan, heather.wilson@usask.ca

Treasurer: Angel Abuelo, Michigan State University, buelo@msu.edu

Nominations chair: Tobias Kaeser, North Carolina State University, tekaeser@ncsu.edu

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Paige Adams, Kansas State University, apadams@ksu.edu

Nomination Committee (Elected by membership)

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Teresia Maina, Iowa State University, twm896@iastate.edu

Paola Boggiatto, USDA NADC, paola.boggiatto@usda.gov

Leela Noronha, USDA ABADRU, leela.noronha@usda.gov

Radhey Kaushik, South Dakota State University, radhey.kaushik@sdstate.edu

Ignavio Correias, Zoetis, nachocorreias@gmail.com

Constitution/By-Laws Committee

Past President: Randy Sacco, USDA NADC, randy.sacco@usda.gov

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