

IOWA VACCINES AND IMMUNOTHERAPEUTICS VIRTUAL CONFERENCE

Connecting University and Industry

Date: May 12th and 13th

Time: 8-10:30am (both days)

**Keynotes will be followed by
breakout sessions on:**

May 12:

- Human vaccines and cancer
- Microbiome/Probiotics
- Diagnostics, pathogen detection,
and biosensors

May 13:

- Vet vaccines and disease
prevention
- Platform technologies/institutes
- Startups

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In partnership with:

PROGRAM SCHEDULE

Wednesday May 12, 8 - 10:30 AM

8:00 Welcome and intro to meeting

8:05 Keynote 1

- Dr. Balaji Narasimhan - Overview of Nanoparticles/Nanovaccines

8:45 - Break out sessions

• Human Vaccines and Cancer

- Dr. Aliasger Salem - Nanoparticle-based vaccines
- Dr. Steven Varga - Promising polyanhydride RSV nanovaccine candidates
- Dr. George Weiner - A novel diagnostic platform for quantifying receptor occupancy by ligand
- Dr. Kevin Legge - Polyanhydride nanoparticles as a platform for the design of effective and novel universal influenza virus vaccines
- Dr. Karin Allenspach - 3D organoids to streamline healthcare in bladder cancer; a ONE HEALTH approach
- Dr. Michael Cho - Receptor binding domain (RBD) - based subunit vaccines against SARS-COV2

• Microbiome/Probiotics

- Dr. Mark Lyte - Microbial endocrinology as a platform for mechanistically designed probiotics and synbiotics
- Dr. Albert Jergens - Ex vivo/in vivo testing of dietary and probiotic interventions in healthy dogs
- Dr. Gregory Phillips - Probiotic bacteria for improved human and animal health
- Dr. Melha Mellata - Novel prophylactics to improve gut immunity in chickens to increase resistance to bacteria and improve health
- Dr. Michael Wannemuehler - Gnotobiotic mice applications

• Diagnostics, Pathogen Detection, Biosensors

- Dr. Nigel Reuel - Cell-free synthetic biology and resonant sensors for infection disease and pathogen detection.
- Dr. Carmen Gomes - Laser-induced graphene for pathogens and toxins in-field sensing.
- Dr. Nicole Hashemi - An advanced and reproducible 3D cell culture platform: mitigating risk in drug development and testing processes.
- Dr. Pranav Shrotriya - Nanoporous Alumina-based Electrochemical Aptasensors for Biomarker Detection.

PROGRAM SCHEDULE

Thursday May 13, 8-10:30 AM

8:00 Keynote 2

- Dr. Claire Andreasen - ONE HEALTH - Our Role

8:45 - Break out sessions

• **Veterinary Vaccines and Disease Prevention**

- Dr. Jennifer Wilson-Welder - Bovine Leptospirosis infection and vaccination: antigen delivery in novel adjuvants and platforms
- Dr. Jodi McGill - Development of a novel vaccine for BRSV infection in calves
- Dr. David Verhoeven - Development and optimization of a novel universal influenza vaccine for multiple species
- Dr. Pat Halbur - New and Emerging Disease in Animal Health
- Dr. Douglas Jones - Vaccine Implants: a versatile approach
- Dr. Jonathan Mochel - Accelerating drug discovery in veterinary medicine with 3d canine organoids
- Dr. Richard Martin - Drugs and drug targets: Nematode Ion-Channels

• **Platform Technologies/Institutes**

- Dr. Chris Tuggle - SCID Pigs as a large animal model for testing stem cell-based and cancer immunotherapies
- Dr. Jonathan Mochel - Pre-clinical screening of therapeutic drugs using 3D canine miniature organs
- Dr. Paul Plummer - NIAMRRE
- Dr. Jim Roth - Veterinary Biologics Training Program – what you need to know to get a veterinary biologic licensed
- Dr. Bryan Bellaire - BL III Laboratories service and technical capacities
- Rick Sanders - ISU Research Park – Bringing Biotechnology to Life

• **Startups**

- Darin Heisterkamp - NanoSPY - Rapid Pathogen Detection Biosensor - Sampling to Detection in 20 min
- Dr. Wes Wierson - LEAH - A platform for translational immunotherapy modeling in spontaneous canine disease
- Dr. Nicole Hashemi - Nistron LLC - A new 3D cell culturing platform: Changing the future of customized immunotherapy
- Dr. Jonathan Mochel & Dr. Karin Allenspach - 3D - Accelerating drug discovery in veterinary medicine with 3D canine organoids