

The 11th European PRRS Research Award

Boehringer Ingelheim recognizes scientific excellence by awarding three research proposals with a funding of **25,000 Euro** each.

Boehringer Ingelheim, a global leader in animal health, honours three research proposals with a total funding of **75,000 Euro** (25,000 Euro each) to encourage further development of practical methods for controlling PRRS (Porcine Reproductive and Respiratory Syndrome), and to recognize scientific accomplishments in this field.

The independent European PRRS Research Award review board is chaired by Enric Mateu (Universidad Autònoma de Barcelona) with members from across swine practice and academia: Julia Stadler (LMU Munich), Nicolai Weber (Danish Agriculture & Food Council), Giovanbattista Danilo Guadagnini (VetEvolution), Carles Vilalta (IRTA-CReSA) and Joachim Seelhoff (Vet-Team Vechta).

In 2024, **Boehringer Ingelheim** has sponsored the annual European PRRS Research Award **for the eleventh time**, already funded a total of **825,000 Euro** for practical research projects.

For additional information on PRRS visit:

PRRS.com

Find the three winning proposals on the next pages.





New diagnostic approaches to detect PRRSV in different sampling material.

What was the current status of problem that let you to submit your research proposal?

"PRRSV causes significant economic losses in pig production, with challenges in diagnosis due to low viral loads, especially in endemic farms. Effective control relies on monitoring sow herds using standardized sampling methods like serum, processing fluids, oral fluids, and new alternative samples, such as tongue fluids from dead piglets. Ensuring the stability of viral RNA during transport is crucial for precise PCR and sequencing results, making the evaluation of RNA stabilizers in different sample types critical for improving diagnostic methods."

What is your study objective?

"The study evaluates different transport media for stabilizing PRRSV RNA in various sampling material to enhance viral RNA detection via PCR and facilitate genome sequencing. Various samples, are analyzed with and without stabilizers. The study compares viral concentrations and monitors virus detection after an outbreak in different sampling material and different storage conditions.

It also examines sequencing methods like Sanger sequencing, Next-Generation Sequencing, and nanopore sequencing to provide recommendations for effective PRRSV monitoring."

• How does this PRRS Research Award help to accomplish this objective?

"The PRRS Research Award supports innovative research projects aimed at improving the understanding and management of PRRS in the field. Funding this study can help veterinarians and producers to optimize PRRSV monitoring, particularly in endemic herds where low viral loads and low prevalence might complicate virus detection."



Victoria Schnitzler
 Vetmeduni Vienna, Austria.





Evaluation of the airborne transmission of two PRRSV-1 strains of different virulence levels and of an affordable filtration system to prevent this transmission.

• What was the current status of problem that let you to submit your research proposal?

"PRRS virus can be transmitted within a farm or between farms by several routes. While airborne transmission of PRRSV-2 strains has been demonstrated, airborne transmission of PRRSV-1 strains remains hypothetical."

What is your study objective?

"The aim of the PRRS'R project is to investigate the airborne transmission of two PRRSV-1 strains of different virulence (low and high pathogenic strains) under experimental conditions.

If airborne transmission is demonstrated for at least one of these strains, we will then investigate the efficacy of a simple and inexpensive filtration system to control this spread."

• How does this PRRS Research Award help to accomplish this objective?

"The PRRS Award will cover most of the costs of our in vivo study. This study should enable us to better assess the role of aerosols in the transmission of PRRSV-1 strains and also provide a solution for controlling this airborne transmission."



-Olivier Bourry

Swine Virology Immunology Unit, ANSES Ploufragan Laboratory, France.





IMPACT: Introduction or Mutations of PRRSv? – Advise for Control using advanced geneTic analyses.

• What is the current status of the problem that made you to submit your research proposal?

"Controlling PRRSv is hindered by the virus's high genetic variation. The dominant PRRSv strain in a farm can change through mutations, recombination with other field or vaccine-like strains, or introduction of a new strain. This makes interpreting PRRSv sequence data ambiguous, yet farmers increasingly rely on sequencing to understand PRRSv dynamics and adjust their management."

What is your study objective?

"We plan to adopt cutting-edge genetic methods to distinguish mutations of circulating PRRSv strains, from newly introduced and vaccine-like strains.

Using the virus's evolutionary rate, we further aim to determine when new strains were introduced into farms, and align this with changes in biosecurity and vaccination protocols in farms."

How does this PRRS Research Award help to accomplish this objective?

"Thanks to the European PRRS Research Award, and together with Royal GD (Animal Health Service, Deventer) we can refine the interpretation of sequence data and advise farmers on whether to improve internal biosecurity, external biosecurity, or vaccination strategy."



-Marina Meester

Department of Population Health Sciences, Faculty of Veterinary Medicine, Utrecht University, the Netherlands



Research Proposal Submission Instructions for Funding

Specific Information:

Provide the following information for each project proposal. The proposal must be typed in no less than 12 point type, double spaced, and a maximum of eight pages including cover page, not including the, budget justification, or optional letters of recommendation (only the first eight pages will be read). The curriculum vitae is not part of the project proposal. Restrict the use of scientific acronyms in your proposal.

Outline for Proposals:

- 1 Complete and send the information to paulina.hoerstermann@boehringer-ingelheim.com. Please send also a 1-page Curriculum Vitae for the primary investigator.
- 2 Project Description:
- Current status of problem. Describe the significance of the problem, and summarize the current knowledge and status of the problem.
- Related research or experience of the investigators. Describe contributions or experience related to the proposal's topic.
- **Project objectives.** List multiple objectives separately. State the research question to be answered in each objective.
- Procedures to achieve the objectives.
 Include details of Experimental Design and Methods. Describe how the assays, procedures, and statistical tests will be done.

For example, by following published procedures that are cited, or unpublished procedures that are detailed in the proposal, or by submitting samples to an established service laboratory. Briefly explain key limitations or what might go wrong, and any alternative plan to overcome the problem.

- 3 Originality and innovation. Briefly explain what is novel about the proposal.
- 4 Schedule/timeline for proposed research.
- 5 Value and practical benefits of the proposed research to the swine industry.
- **6** Budget for Project:
- Explain the budget for proposal in regards of: Personnel, Expendables, Indirect costs, Travel, Equipment and Other.
- If the proposal cost exceeds 25,000 Euros, describe the funding available to support the total cost.
- -In case you are interested in discussing a project and want to get further guidance, please don't hesitate contacting your Boehringer Ingelheim representative or send and email to marius.kunze@ boehriger-ingelheim.com
- **7** Letter of recommendation (Optional). Up to two letters of recommendation regarding the objective and importance will be accepted.
- 8 Reach out to one of our PRRS Award consultants in case you would like to get additional support on your proposal.



Further support needed?

To encourage Veterinarians to preapare impactful proposals we offer the expertise of former Review Board member and successful applicant Tomasz Stadejek, Andrea Ladinig and Michele Drigo. Please contact them with your ideas and they can assist you to prepare your submission.

Tomasz Stadejek, Faculty of Veterinary Medicine, Warsaw University of Life Sciences, Poland. His current research is focused on diagnostic and epidemiology of PRRSV, IAV, PCV2, PCV3 and emerging porcine parvoviruses.



Contact Tomasz Stadejek to support you with your proposal

Guillermo Ramis, Faculty of Veterinary Medicine in Murcia, Spain. After 13 years as practitioner in a integration company he moved to academia researching swine health and genetics, biomarkers and viral and bacterial diseases.

Andrea Buzanich-Ladinig, University of Veterinary Medicine Vienna, Austria. Since her PostDoc in Canada, her research focuses on PRRSV. Applied research projects include the testing of different vaccines against PRRSV, the investigation of different diagnostic procedures and sampling methods for the detection of PRRSV, and also the involvement in the Austrian monitoring program of PRRSV.



-Contact Andrea Buzanich-Ladinig to support you with your proposal

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Contact Guillermo Ramis to support you with your proposal

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