

HIEP VU

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EDUCATION

- Ph.D. in Integrative Biomedical Sciences, University of Nebraska-Lincoln, 2013
- M.S. in Veterinary Sciences, University of Nebraska-Lincoln, 2009
- B.Sc. in Veterinary Medicine, Nong Lam University, Vietnam, 2005

PROFESSIONAL APPOINTMENTS

- Associate Professor, Animal Science, UNL, 2022–Present
- Assistant Professor, Animal Science, UNL, 2017–2022
- Research Assistant Professor, Nebraska Center for Virology, UNL, 2014–2017

HONORS AND AWARDS

- Omtvedt Innovation Award Nominee (Teams), 2020
- Parents' Recognition Award for Service to Students, UNL Parents Association, 2018
- Junior Faculty for Excellence in Research, ARD IANR, 2017
- Breakthrough Innovation of the Year, NUtech Ventures, 2015
<https://www.youtube.com/watch?v=WuVVhuQsG2Y&feature=youtu.be>

PROFESSIONAL SERVICES

- Vice Chair, NC-229 Multistate Committee, 2023 – Present
- Scientific Committee Member, North American PRRSV Symposium, 2016 – Present
- Secretary, NC-229 Multistate Committee, 2021 – 2023
- Member-at-Large, NC-229 Multistate Committee, 2019 – 2021
- Member, Study Section for Pre-Clinical Models of Infectious Diseases Program, National Institutes of Health, 2023
- Member, American Society for Virology Membership Committee, 2020 – 2023
- Member, Coronavirus Disease-Immunology Review Panel, Department of Defense Congressionally Directed Medical Research Programs, 2020
- Associate Editor, *Journal of Medical Virology*, 2020 – 2023
- Ad Hoc Reviewer, Discovery-Skin Disorders Review Panel, Department of Defense Congressionally Directed Medical Research Programs, 2021
- Ad Hoc Reviewer, Conference Proposal, USDA-NIFA, 2019
- Ad Hoc Reviewer, USDA-NIFA Exploratory Research Program, 2018
- Ad Hoc Reviewer, Minnesota Pork Board, 2018
- Ad Hoc Reviewer, Industrial Research Fund, Ghent University, Belgium, 2017

TEACHING RESPONSIBILITY

Domestic Animal Immunology (ASCI 444/844) – 3 credits

Veterinary virology (VET MED 687) – 3 credits

RESEARCH FUNDING

Pending

- USDA-NIFA
Project: A Versatile Platform for the Rapid Development and Update of Swine Influenza Virus Vaccines
PI: Vu H., Co-I: Sillman S.
Period: July 2025 – June 2028

Active

- **USDA-NIFA #2023-67015-39657**
Project: Molecular Determinants of Porcine Reproductive and Respiratory Syndrome Virus Cell Tropism
PI: Vu H., Co-I: Sillman S.
Period: May 2023 – April 2026
- **USDA-NIFA #2022-67015-37264**
Project: Partnership: Systematic Screening of African Swine Fever Virus Proteome for Identification of Immunogenic Antigens
PD: Vu H., Co-PDs: McVey S., Lai H.
Period: July 2022 – June 2025
- NU Collaboration Initiative
Project: A Novel Self-Amplifying mRNA Vaccine Platform Against Swine Influenza Virus
PI: Vu H., Co-PI: Davis P.
Period: July 2022 – June 2024
- NE Pork Production Association
Project: PRRS Transmission Risk Associated with Exposure to Slurry Manure or Effluent from a PRRS-Positive Swine Herd
PI: Schmidt A., Co-PIs: Vu H., Mote B.
Period: September 2022 – August 2024
- USDA-NIFA Grant No. 2020-67015-31414
Project: Development of a Broadly Protective Vaccine Against Swine Influenza Virus
PD: Vu H., Co-PDs: Ly H., Gauger P.
Period: July 2020 – June 2023
- NE AES/Enhanced-Hatch
Project: A Novel Platform for Rapid and Sustainable Induction of Protective Immunity Against Animal Influenza Viruses (NC-229)
PD: Vu H., Co-PDs: Dehlon G., Sillman S.
Period: October 2019 – September 2024

- NE AES/Animal Health
Project: Identify Novel Host Factors Required for Porcine Reproductive and Respiratory Syndrome Virus Infection
PD: Vu H., Co-PDs: Libault M., Ciobanu D.
Period: October 2019 – September 2024

Completed

- NE AES/Animal Health
Project: Identification of Novel Pathogens and Evaluation of Host Genetics Role in Viral Disease Susceptibility
PI: Ciobanu D (PD), Vu H (Co-PD), Harris S
Period: Oct 2018 – Sep 2023
- USDA-NIFA Grant No. 2018-67015-28294
Project: Development of a Broadly Protective DIVA Marker Vaccine Against PRRSV
PI: Vu H (PD), Osorio F (Co-PD)
Period: Jun 2018 – May 2021
- USDA-NIFA Grant No. 2017-67015-26634
Project: Investigation of Host Genetic Role in PCV2 and PRRSV Susceptibility
PI: Ciobanu D, Vu H (Co-PD), Kachman S
Period: Jul 2017 – Jun 2021
- NE AES/Animal Health
Project: Development of Broadly Protective Vaccines Against PRRSV
PI: Vu H (PD), Osorio F (Co-PD)
Period: Oct 2016 – Sep 2019
- Matmacorp
Project: Experimental Infection of Boars with PRRSV
PI: Vu H
Period: Nov 2019 – Oct 2020
- Matmacorp
Project: Experimental Inoculation of Pigs with PRRSV
PI: Vu H
Period: Dec 2018 – May 2019
- National Pork Board Grant No. 17-151
Project: Targeted Development of Neutralizing Monoclonal Antibodies Against PRRSV Minor Glycoprotein
PI: Vu H, Osorio F (Co-PI)
Period: Oct 2017 – Sep 2018

- Phibro Animal Health
Project: Evaluation of the Protective Efficacy of pMJPRRS Vaccine in Pigs
PI: Vu H, Osorio F (Co-PI)
Period: Mar 2018 – Mar 2019
- USDA-NIFA Grant No. 2016-67015-24922
Project: Correlates of Cross-Protective Immunity to PRRSV
PI: Vu H (PD), Osorio F, Ma F (Co-PDs)
Period: Feb 2016 – Feb 2019
- National Pork Board Grant No. 16-060
Project: Broadly Protective Nasal Mucosal Vaccine for Influenza A Virus of Swine
PI: Vu H, Weaver E, Osorio F, Ma F (Co-PIs)
Period: May 2016 – May 2018
- Auburn University
Project: Evaluation of Protective Efficacy of Peptide-Based Vaccines Against PRRSV
PI: Vu H, Osorio F (Co-PI)
Period: May 2016 – Apr 2017
- Auburn University
Project: Evaluation of Protective Efficacy of Peptide-Based Vaccines Against PRRSV
PI: Vu H, Osorio F (Co-PI)
Period: May 2016 – Apr 2017
- National Pork Board Grant No. 15-159
Project: Development of a Live-Attenuated PRRSV Vaccine Capable of Eliciting a Broad Spectrum of Heterologous Protection
PI: Vu H, Osorio F (Co-PI)
Period: Oct 2015 – Mar 2017
- National Pork Board Grant No. 14-214
Project: Evaluation of Immunodominant B- and T-Cell Epitopes as Inducers of Protective Immunity Against PRRSV
PI: Diel D, Vu H, Nelson E, Henning J (Co-PIs)
Period: Oct 2014 – Sep 2016
- National Pork Board Grant No. 14-200
Project: Determine the Mechanisms of Cross-Protection Against Infection with a Divergent PRRSV Strain
PI: Vu H, Osorio F (Co-PI)
Period: Oct 2014 – Sep 2015
- National Pork Board Grant No. 13-155
Project: Rational Design of a Broadly Protective Vaccine Against PRRSV

PI: Vu H, Osorio F (Co-PI)
Period: Oct 2013 – Sep 2014

INVENTIONS

1. A Non-Naturally Occurring Porcine Reproductive and Respiratory Syndrome Virus and Methods of Using
 - Inventors: Vu HL, Osorio FA, Laegreid W, Pattnaik AK, Ma F
 - Patent Nos.: 10,072,046 (issued Sep 11, 2018), 10,738,088 (issued Aug 11, 2020), 11,136,355 (issued Oct 5, 2021)
2. Synaptogyrin-2 Influences Replication of Porcine Circovirus 2
 - Inventors: Ciobanu D, Vu HL, Engle T, Walker L
 - Patent Application No.: US 16/149,059 (filed Oct 1, 2018)

LICENSED TECHNOLOGIES

1. A Method for the Development of a Porcine Reproductive and Respiratory Virus Vaccine Strain Capable of Inducing Broad Protection
 - Inventors: Vu HL, Osorio FA, Laegreid W, Pattnaik AK, Ma F
 - NUtech Technology Ref.: 2173
2. A Virulent Isolate Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) and Methods of Using
 - Inventor: Vu HL
 - NUtech Technology Ref.: 2020-050

BOOK CHAPTER

1. Kennedy M, Delhon G, McVey DS, **Vu H**, and Borca M. 2021. Chapter 49: Asfarviridae and Iridoviridae. In *Veterinary Microbiology*, 4th Edition.; McVey, S., Kennedy, M., M.M. Chengappa, M.M., Wilkes, R., Eds. Wiley Blackwell: 2022.

I wrote the section “Host responses to infection” and edited the chapter.

PEER-REVIEWED PUBLICATIONS (2017 – Current)

1. Vu HD, Luong HQ, Lai HTL, Nguyen HT, Pham TH, Truong LQ, Nguyen GV, Vu HL*. 2024. Evaluation of the Diagnostic Sensitivity and Specificity of Two Pen-Side Tests for Detecting African Swine Fever Virus in Experimentally Infected Pigs. *Arch Virol*. 2024 Jul 30;169(8):170. [PMID: 39080100](#).
2. Nguyen NT, Lai DC, Silman S, Petro-Turnquist E, Weaver E, Vu HL*. 2024. Lipid Nanoparticle-encapsulated DNA Vaccine Confers Protection Against Swine and Human-Origin H1N1 Influenza Viruses. *mSphere*. 2024 Aug 1:e0028324. [PMID: 39087764](#).

3. Lai DC, Chaudhari J, Vu HLX. 2024. African swine fever virus early protein pI73R suppresses the type-I IFN promoter activities. *Virus Res* 343:199342. [PMID: 38408646](#).
4. Vu HLX, McVey DS. 2024. Recent progress on gene-deleted live-attenuated African swine fever virus vaccines. *NPJ Vaccines* 9:60. [PMID: 38480758](#).
5. Walker LR, **Vu HL**, Montooth KL, Ciobanu DC. **2023**. Functional and evolutionary analysis of host Synaptogyrin-2 in porcine circovirus type 2 susceptibility. *PLoS Genet* 19:e1011029. [PMID: 38011217](#).
6. Eaton CW, **Vu HL**, Hodges AL, Harris SP, Kachman SD, Ciobanu DC. 2023. Host-genetic-based outcome of co-infection by PCV2b and PRRSV in pigs. *J Anim Sci* 101. [PMID: 37210473](#).
7. Petro-Turnquist E, Pekarek M, Jeanjaquet N, Woledge C, Steffen D, **Vu H**, Weaver EA. **2023**. Adenoviral-vectored epigraph vaccine elicits robust, durable, and protective immunity against H3 influenza A virus in swine. *Front Immunol* 14:1143451. [PMID: 37256131](#).
8. Nguyen TN, Kumari S, Sillman S, Chaudhari J, Lai DC, **Vu HLX**. **2023**. A Single-Dose Intramuscular Immunization of Pigs with Lipid Nanoparticle DNA Vaccines Based on the Hemagglutinin Antigen Confers Complete Protection against Challenge Infection with the Homologous Influenza Virus Strain. *Vaccines*. 2023; 11(10):1596. [PMID: 37896997](#).
9. Luong HQ, Lai HTL, Truong LQ, Nguyen TN, Vu HD, Nguyen HT, Nguyen LT, Pham TH, McVey DS, **Vu HLX**. **2023**. Comparative Analysis of Swine Antibody Responses following Vaccination with Live-Attenuated and Killed African Swine Fever Virus Vaccines. *Vaccines*. 2023; 11(11): 1687. [PMID: 38006019](#).
10. Kumari S, Chaudhari J, Huang Q, Gauger P, De Almeida MN, Ly H, Liang Y, **Vu HLX**. **2023**. Assessment of Immune Responses to a Trivalent Pichinde Virus-Vectored Vaccine Expressing Hemagglutinin Genes from Three Co-Circulating Influenza A Virus Subtypes in Pigs. *Vaccines* 2023, 11(12), 1806. [PMID: 38140210](#).
11. Chaudhari J, Leme RA, Durazo-Martinez K, Sillman S, Workman AM, **Vu H.L.*** 2022. A single amino acid substitution in porcine reproductive and respiratory syndrome virus glycoprotein 2 significantly impairs its infectivity in macrophages. *Viruses* 2022, Dec 18;14(12):2822. [PMID: 36560826](#).
12. Kumari S., Chaudhari J., Huang Q., Gauger P., Almeida M., Liang Y., Ly H., **Vu H.L.***, Immunogenicity and protective efficacy of a recombinant Pichinde viral vectored vaccine expressing influenza virus hemagglutinin antigen. *Vaccines (Basel)*. 2022 Aug 26;10(9):1400. [PMID: 36146478](#).
13. Hille, M.M., Spangler, M.L., Clawson, M.L., Heath, K.D., **Vu, H.L.**, Rogers, R.E.S., Loy, J.D., A Five Year Randomized Controlled Trial to Assess the Efficacy and Antibody Responses to a Commercial and Autogenous Vaccine for the Prevention of Infectious Bovine Keratoconjunctivitis. *Vaccines (Basel)*. 2022 Jun 9;10(6):916. [PMID: 35746524](#).
14. Chaudhari, J., Nguyen, T.N., **Vu, H.L.***, Identification of Cryptic Promoter Activity in cDNA Sequences Corresponding to PRRSV 5' Untranslated Region and Transcription Regulatory Sequences. *Viruses*. 2022 Feb 15;14(2):400. [PMID: 35215993](#).

15. Luong Q.H., Lai T.L.H., Do L.D., Ha X.B., Nguyen V.G. and **Vu H.L.**, 2022. Differential antibody responses in sows and finishing pigs naturally infected with African swine fever virus under field conditions. *Virus Res.* 2022 Jan 2;307:198621. [PMID: 34799123](#).
16. Dhakal J, **Vu H.L.**, Chaudhari J, Nguyen K, Chaves B D . 2022. Method Validation for the Recovery of the Porcine Respiratory and Reproductive Syndrome Virus a Potential SARS-CoV-2 Surrogate, from Stainless Steel. *Letters in Applied Microbiology*, ovac068, <https://doi.org/10.1093/lambio/ovac068>.
17. Chaudhari J., Liew CS, Riethoven JJ, Sillman S., and **Vu H.***, 2021. Porcine reproductive and respiratory syndrome virus infection upregulates negative immune regulators and T cell exhaustion markers. *J Virol.* 2021 Oct 13;95(21):e0105221. [PMID: 34379512](#).
18. Truong, Q.L., Nguyen, T.L., Nguyen, T.H., Shi, J., **Vu, H.L.**, Lai, T.L.H., Nguyen, V.G., 2021. Genome Sequence of a Virulent African Swine Fever Virus Isolated in 2020 from a Domestic Pig in Northern Vietnam. *Microbiol Resour Announc* 10:e00193-21. [PMID: 33986078](#)
19. Chaudhari J., and **Vu H***. Porcine Reproductive and Respiratory Syndrome Virus Reverse Genetics and the Major Applications. *Viruses.* 2020 Oct 31;12(11). Review. [PMID: 33142752](#)
20. Luong, H.Q., Lai, T.L.H., and **Vu, H*.**, 2020. Evaluation of Antibody Response Directed against Porcine Reproductive and Respiratory Syndrome Virus Structural Proteins. *Vaccines* 2020, 8, 533. [PMID: 32947931](#)
21. Chaudhari J., Liew CS, Workman A, Riethoven JJ, Steffen D., Sillman S and **Vu H.***, 2020. Host Transcriptional Response to Persistent Infection with a Live-Attenuated Porcine Reproductive and Respiratory Syndrome Virus Strain. *Viruses* 2020, 12(8), 817. [PMID: 32731586](#)
22. Sun, H., Sur, J.H., Sillman, S., Steffen, D., **Vu, H.***, 2019. Design and characterization of a consensus hemagglutinin vaccine immunogen against H3 influenza A viruses of swine. *Vet Microbiol* 239, 108451. [PMID: 31767095](#)
23. Walker LR, Engle TB, **Vu H**, Tosky ER, Nonneman DJ, Smith TPL, Borza T, Burkey TE, Plastow GS, Kachman SD, and Ciobanu DC*. 2018. Synaptogyrin-2 influences replication of Porcine circovirus 2. *PLoS Genet.* Oct 31;14(10):e1007750. [PMID: 30379811](#)
24. Sun H, Workman A, Osorio FA., Steffen D, and **Vu H***. 2018. Development of a broadly protective modified-live virus vaccine candidate against porcine reproductive and respiratory syndrome virus. *Vaccine* 36(1):66-73. [PMID: 29174314](#)
25. Pattnaik, A., Palermo, N., Sahoo, B. R., Yuan, Z., Hu, D., Annamalai, A. S., **Vu, H.**, Correias, I., Prathipati, P. K., Destache, C. J., Li, Q., Osorio, F., Pattnaik, A., Xiang, S.-H. 2018. Discovery of a non-nucleoside RNA polymerase inhibitor for blocking Zika virus replication through in silico screening. *Antiviral research.* [PMID: 29274845](#)
26. Annamalai, A. S., Pattnaik, A., Sahoo, B. R., Muthukrishnan, E., Natarajan, S., Steffen, D. J., **Vu, H.**, Delhon, G., Osorio, F., Petro, T. M., Xiang, S.-H., Pattnaik, A. 2017. Zika Virus

Encoding Non-Glycosylated Envelope Protein is Attenuated and Defective in Neuroinvasion. *J. Virology* vol. 91 no. 23 e01348-17. [PMID: 28931684](#)

27. Kimpston-Burkgren K, Correas I, Steffen D, Pattnaik AK, Fang Y Osorio FA and **Vu HL***. 2017. Relative contribution of porcine reproductive and respiratory syndrome virus open reading frames 2–4 to the induction of protective immunity. *Vaccine* **35**: 4408–4413. [PMID: 28689650](#)
28. Correas I, Pattnaik AK, Osorio, FA, and **Vu HL***. 2017. Cross-reactivity of immune responses to porcine reproductive and respiratory syndrome virus infection. *Vaccine* **35**: 782–788. [PMID: 28062126](#)
29. **Vu HL***, Pattnaik AK, and Osorio FA. 2017. Strategies to broaden the cross-protective efficacy of vaccines against porcine reproductive and respiratory syndrome virus. *Veterinary Microbiology* **206**: 29–34. [PMID: 27692670](#)
30. Sun H, Pattnaik AK, Osorio FA and **Vu HL***. 2016. Identification of viral genes associated with the interferon-inducing phenotype of a synthetic porcine reproductive and respiratory syndrome virus strain. *Virology* **499**: 313–321. [PMID: 27736706](#)
31. Workman AM*, Smith TP, Osorio FA, **Vu HL***. 2016. Complete genome sequence of highly virulent porcine reproductive and respiratory syndrome virus variants that recently emerged in the United States. *Genome Announcement* **4(4)**:e00772-16. [PMID: 27491998](#)
32. **Vu HL***, Ma F, Laegreid WW, Pattnaik AK, Steffen D, Doster AR, and Osorio FA*. 2015. A synthetic porcine reproductive and respiratory syndrome virus strain confers unprecedented levels of heterologous protection. *J Virol.* **89(23)**:12070-83. [PMID: 26401031](#)
33. Massilamany C, Gangaplara A, Basavalingappa RH, Rajasekaran RA, **Vu HL**, Riethoven JJ, Steffen D, Pattnaik AK, and Reddy J*. 2015. Mutations in the 5' NTR and the non-structural protein 3A of the coxsackievirus B3 selectively attenuate myocarditogenicity. *PLoS One.* **10(6)**:e0131052. [PMID: 26098885](#)
34. **Vu HL**, Kwon B, de Lima M, Pattnaik AK, and Osorio FA*. 2013. Characterization of a serologic marker candidate for development of a live-attenuated DIVA vaccine against porcine reproductive and respiratory syndrome virus. *Vaccine* **31**: 330–4337. [PMID: 23892102](#)
35. Beura LK, Subramaniam S, **Vu HL**, Kwon B, Pattnaik AK, and Osorio FA*. 2012. Identification of amino acid residues important for anti-IFN activity of porcine reproductive and respiratory syndrome virus non-structural protein 1. *Virology* **433**: 431–439. [PMID: 22995188](#)
36. **Vu HL**, Kwon B, Yoon KJ, Laegreid WW, Pattnaik AK, and Osorio FA*. 2011. Immune evasion of porcine reproductive and respiratory syndrome virus through glycan shielding

involves both glycoprotein 5 as well as glycoprotein 3. *J Virol.* **85(11):5555-64**. [PMID: 21411530](#) (*Selected for Spotlight section of the issue*).

37. Das PB, Vu HL, Dinh PX, Cooney JL, Kwon B, Osorio FA, and Pattnaik AK*. 2011. Glycosylation of minor envelope glycoproteins of porcine reproductive and respiratory syndrome virus in infectious virus recovery, receptor interaction, and immune response. *Virology* **410: 385–394**. [PMID: 21195444](#)

INVITED PRESENTATIONS

1. **A Single-Dose Intramuscular Immunization of Pigs with Lipid Nanoparticle DNA Vaccines Based on the Hemagglutinin Antigen Confers Complete Protection Against Challenge Infection with the Homologous Influenza Virus Strain**
Swine in Biomedical Research Conference, Madison, WI, Jun 16, 2024
2. **Futuristic Vaccine: DNA Vaccine**
American Association of Swine Veterinarians, Nashville, TN, Feb 26, 2024
3. **New Insights into PRRSV Tropism**
The Michael Murtaugh Lecturer, University of Minnesota, Jun 14, 2023
4. **Biotechnology for the Next Generation of Veterinary Antiviral Vaccines**
In Vitro Biology Meeting, San Diego, CA, Jun 4-7, 2022
5. **Synthetic Biology and the Future of Swine Vaccines**
PorciForum, Lleida, Spain, Mar 23-24, 2022
6. **The Journey to a New Generation of Vaccines Against Porcine Reproductive and Respiratory Syndrome Virus**
Vietnam National Conference on Animal & Veterinary Sciences, Ho Chi Minh City, Vietnam, Sep 2019
7. **Overview of Gene Technologies for Developing Viral Vaccines for Swine**
Swine Viral Vaccines Workshop, Nong Lam University, Ho Chi Minh City, Vietnam, Jun 7-8, 2018
8. **Challenges and Genetic Engineering in Developing Vaccines Against Positive-Strand RNA Viruses**
Swine Viral Vaccines Workshop, Nong Lam University, Ho Chi Minh City, Vietnam, Jun 7-8, 2018
9. **Challenges and Genetic Engineering in Developing a Vaccine Against Negative-Strand RNA Viruses**
Swine Viral Vaccines Workshop, Nong Lam University, Ho Chi Minh City, Vietnam, Jun 7-8, 2018
10. **Rational Design of a Broadly Protective Vaccine Against Porcine Reproductive and Respiratory Syndrome Virus**
University of Minnesota College of Veterinary Medicine Seminar Series, Nov 2016

11. Control and Eradication of PRRSV: How Next-Generation Sequencing Can Help
US Meat Animal Research Center, Clay Center, NE, Aug 2015

12. Strategies to Develop a New PRRSV Vaccine with Broader Cross-Protection
Vaccines Against Antigenically Variable Viruses Symposium, Ames, IA, Jun 2014

POSTER AND ORAL PRESENTATIONS (2017 – Current)

Asterisk () denotes my mentored Grad Student or Postdoctoral associate*

1. Luong H., Nguyen T., Vu H., Lai H., Nguyen H., Truong L., Vu H., Comparative Analysis of Antibody Responses to African Swine Fever Structural Protein Between Attenuated Live and killed vaccine. International Conference of Swine Viral Diseases. Nov 30-Dec 2 2023. Chicago, IL.
2. Lai D., Chaudhari J., Vu H. African swine fever virus protein I73R suppresses the type-I IFN production by broadly inhibiting the host protein transcription. International Conference of Swine Viral Diseases. Nov 30-Dec 2 2023. Chicago, IL.
3. Durazo-Martinez K., Chaudhari J., Kumari S., Vu H., Reassessment of the Susceptibility of Different Porcine Macrophage Populations to Porcine Reproductive Respiratory syndrome virus. International Conference of Swine Viral Diseases. Nov 30-Dec 2 2023. Chicago, IL.
4. Nguyen T., Kumari S., Sillman S., Chaudhari J., Lai D., and Vu H., A single-dose intramuscular immunization of pigs with lipid-nanoparticle DNA vaccines based on the hemagglutinin antigen confers complete protection against challenge infection with the homologous influenza virus strain. International Conference of Swine Viral Diseases. Nov 30-Dec 2 2023. Chicago, IL.
5. Kumari S.*, Chaudhari J., Huang Q., Almeida M., Gauger P., Liang Y., Ly H., Vu H. Recombinant Pichinde virus expressing hemagglutinin antigen confers protection against influenza A virus in pigs. The American Society for Virology Annual Meeting. Madison WI, July 16-20, 2022. Abstract no. W53-13.
6. Durazo Martinez K.Y.*, Chaudhari J., Zhang C., Thibivilliers S., Libault M., H. Vu., Transcriptome profiling of PRRSV infected porcine alveolar macrophages by single cell sequencing. The American Society for Virology Annual Meeting, Madison, WI, July 16-20, 2022. Abstract no. P20-35.
7. Chaudhari J.*, Leme R. A., Durazo Martinez K.Y., Sillman S., Workman A.M., Vu H., New insight into determinants of porcine reproductive and respiratory syndrome virus tropism. ASV, Madison, WI, July 16-20, 2022. Abstract no. W11-6.
8. Luong Q.H.*, Lai T.L.H., Do L.D., Ha X.B., Nguyen V.G. and Vu H.L. Preliminary profiling of swine humoral immune response to highly virulent African swine fever virus in Vietnam. ASV, Madison, WI, July 16-20, 2022. Abstract no. P4-3.

9. Chaudhari J.*, Leme R.A., Durazo-Martinez K.Y., Sillman S., Workman A.M., **Vu H.L.** Identification of conserved amino acid residue on PRRSV glycoprotein 2 critical for infectivity in macrophages. *ICSVD, Chicago, IL, Dec 2 – 4, 2022.*
10. Walker L.R. **Vu H.L.**, Giobanu D.C., Deconstructing the Role of SYNGR2 in Viral Disease Susceptibility in Swine. *ICSVD, Chicago, IL, Dec 2 – 4, 2022.*
11. Durazo-Martinez K.Y.*, Chaudhari J., Vu T., Zhang C., Thibivilliers S., Libault M., and **Vu H.L.** PRRSV infection of alveolar macrophages promotes inflammation and inhibits apoptosis. *ICSVD, Chicago, IL, Dec 2 – 4, 2022.*
12. Kumari S. *, Chaudhari J., Huang Q., Gauger P., Almeida M., Liang Y., Ly H., Vu H. A trivalent Pichinde virus vectored vaccine expressing HA proteins of H1N1, H1N2 and H3N2 influenza viruses elicit a balanced protective immunity against influenza infection of pigs. *ICSVD, Chicago, IL, Dec 2 – 4, 2022.*
13. Luong H.Q.* , Lai H.T.L., Duc L.D., Ha B.X., Nguyen G.V., Truong L.Q., McVey D.S., **Vu H.L.**, Partnership: Systematic screening of ASFV proteome to identify immunogenic antigens. *ICSVD, Chicago, IL, Dec 2 – 4, 2022.*
14. Chaudhari J.* , Liew C-S., Riethoven J.J., Sillman S., and **Vu H.**, Porcine reproductive and respiratory syndrome virus infection upregulates negative immune regulators and T-cell exhaustion markers. The American Society for Virology Annual Meeting, Virtual. *July 19 - 23, 2021.*
15. Chen W-Y., Grinkova Y., Husmann R., Sligar S.G., Nguyen T.N., **Vu H.**, and Zuckermann F.A., Effective protection induced by an experimental subunit DIVA vaccine against PRRS virus. The NA PRRS Symposium, Chicago, IL. December 4th, 2021.
16. Chaudhari J.*, Leme R. A., Sillman S., Workman A., and Vu H., A single amino acid mutation in porcine reproductive and respiratory syndrome virus glycoprotein 2 significantly impairs its infectivity in macrophages. Abstract no. 13. CRWAD, Chicago IL. December 3-7, 2021.
17. Chaudhari J*, Liew C-S., Riethoven J.J., Sillman S., and Vu H., Comparative analysis of transcriptome profiles between directly infected and bystander alveolar macrophages collected from pigs infected with PRRSV. CRWAD, Chicago IL. December 3-7, 2021.
18. Chaudhari J.* , Nguyen T. N., Vu H., Cryptic promoter activity in cDNA sequence corresponding to Arterivirus 5' untranslated region. Abstract no. 142. CRWAD, Chicago IL. December 3-7, 2021.
19. Vu, H., Ly H., Gauger P., Development of a broadly protective vaccine against swine influenza A virus. CRWAD, Chicago IL. December 3-7, 2021.

20. Bustamante-Córdova L.*, Steffen D., Silman S., and Vu H., Assessment of the feasibility of using neutralizing monoclonal antibody to protect pigs against swine influenza virus. CRWAD, Chicago IL. December 3-7, 2021.
21. Walker L.R., Vu H., and Ciobanu D.C., Deconstructing the Role of SYNGR2 in Viral Disease Susceptibility in Livestock. CRWAD, Chicago IL. December 3-7, 2021.
22. Wijesena H.R., Walker L.R., Eaton C.W., Sutton K.M., Harris S., Kachman S.D., Vu H., and Ciobanu D.C. Investigation of Host Genetic Role in PCV2 and PRRSV Susceptibility. CRWAD, Chicago IL. December 3-7, 2021.
23. Chaudhari J.*, Liew CS, Workman AM, Riethoven JM, Steffen D, Sillman S, **Vu HL**. Host Immune Responses to a Live-attenuated Porcine Reproductive and Respiratory Syndrome Virus Vaccine Candidate. *Nebraska Center for Virology Annual Retreat, March 22, 2020, Nebraska City, NE. Abstract was submitted but the Meeting was cancelled due to the pandemic.*
24. Chaudhari J*, Liew CS, Workman AM, Riethoven JM, Steffen D, Sillman S, **Vu HL**. Host Immune Responses to a Live-attenuated Porcine Reproductive and Respiratory Syndrome Virus Vaccine Candidate. *The 39th ASV Annual Meeting, June 13-17, 2020, Fort Collins, Colorado, USA. Abstract was submitted but the Meeting was cancelled due to the pandemic.*
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