

医療分野国際科学技術共同研究開発推進事業
地球規模課題対応国際科学技術協力プログラム（SATREPS）
令和7年度追跡調査報告書

1. 研究開発課題名

オオコウモリを対象とした生態学調査と狂犬病関連及びその他のウイルス感染症への関与
（平成26年度－令和元年度）

2. 研究開発代表者（所属は研究開発終了時）

- 日本側研究開発代表者： 本道 栄一（名古屋大学大学院生命農学研究科 教授）
- 相手国側研究開発代表者： Srihadi Agungpriyono（インドネシアボゴール農業大学獣医学部 学部長）

3. 研究開発の概要

本研究課題では、（i）オオコウモリの行動調査、（ii）オオコウモリが保有するウイルス解析、（iii）リッサウイルス感染症におけるオオコウモリの影響の調査を行った。研究開発期間中には、共同研究を通じて、オオコウモリを対象とした生態調査、ウイルス分離、ウイルスゲノム解析等の技術をインドネシアへ定着させ、現地の研究者が自ら各種調査等を実施できる研究基盤を構築した。

4. 追跡調査結果

本研究開発の上位目標（研究開発期間終了後5年程度での実現を想定）は「サーベイランスに基づく新興感染症情報の普及、それによる人々の自己予防、行政の対策によりコウモリ由来感染症罹患者の減少に資する」ことであり、以下の項目について調査を行った。

4-1. 研究開発終了後も上位目標に向けた活動（研究活動のみならず関連する取組みも含む）が継続・発展しているか。

SATREPS 研究開発終了後も活動を継続するため、インドネシアボゴール農業大学に東京農工大学農学部附属感染症未来疫学研究センターの拠点を設置した。資金不足のために一部の設備や機材の故障に迅速に対応できないことがあるものの、新型コロナウイルス感染症による影響で日本人研究者の渡航ができない期間中にもオンライン会議で情報共有・意見交換を継続し、2023年からは渡航を再開している。

4-2. 日本への波及効果はあるか、または日本にとっての成果は何か。

本研究開発期間中には、オオコウモリによる新興感染症伝播の可能性を提示し、研究開発期間終了後に日本研究チームがその可能性等に関して34報¹の論文を発表する成果が認められている。

4-3. 研究成果はどのような形で相手国に普及されているか。国際共同研究の実施による成果・波及効果は何か（日本と相手国の人材育成、開発途上国の自立的 研究開発能力の向上、共同研究の増加、相手国からの委託研究、など）。研究成果は地球規模課題の解決に向けた科学技術の発展にも波及・貢献しているか。

プロジェクト期間中に日本の大学で博士号を取得したインドネシア研究者3名は、現在インドネシアボゴール農業大学附属動物病院の副院長、講師等として活躍している。プロジェクト期間中に定着された各種技術を活用し、インドネシア研究者による研究・論文発表が活発に行われており、研究開発期間終了後、インドネシア研究者を筆頭著者とする論文が51報²発表された。また、本研究開発に参加した研究者からインドネシアボゴール農業大学医学部の学部長、Global Health Agromaritime-One Health Collaborating Center³の所長が輩出されており、インドネシアにおけるワンヘルス研究を統括する役割を担っている。

¹ 研究開発期間終了後に日本研究チームが発表した論文

- Hondo E, Katta T, Sato A, Kadofusa N, Ishibashi T, Shimoda H, Katoh H, Iida A. Antiviral effects of micafungin against pteropine orthoreovirus, an emerging zoonotic virus carried by bats. *Virus Res.* 2024 Jan 2;339:199248. doi: 10.1016/j.virusres.2023.199248.
- Rattanatumhi K, Prasertsincharoen N, Naimon N, Kuwata R, Shimoda H, Ishijima K, Yonemitsu K, Minami S, Supriyono, Tran NTB, Kuroda Y, Tatemoto K, Virhuez Mendoza M, Hondo E, Rerkamnuaychoke W, Maeda K, Phichitraslip T. A serological survey and characterization of Getah virus in domestic pigs in Thailand, 2017–2018. *Transbound Emerg Dis.* 2022 Mar;69(2):913-918. doi: 10.1111/tbed.14042.
- Tarigan R, Katta T, Takemae H, Shimoda H, Maeda K, Iida A, Hondo E*. Distinct interferon response in bat and other mammalian cell lines infected with Pteropine orthoreovirus. *Virus Genes.* 2021 Dec;57(6):510-520. doi: 10.1007/s11262-021-01865-6.
- Iida A, Takemae H, Tarigan R, Kobayashi R, Kato H, Shimoda H, Omatsu T, Supratikno, Basri C, Mayasari NLPI, Agungpriyono S, Maeda K, Mizutani T, Hondo E*. Viral-derived DNA invasion and individual variation in an Indonesian population of large flying fox *Pteropus vampyrus*. *J Vet Med Sci.* 2021 Jul 2;83(7):1068-1074. doi: 10.1292/jvms.21-0115.
- Kimprasit T, Nunome M, Iida K, Murakami Y, Wong ML, Wu CH, Kobayashi R, Hengjan Y, Takemae H, Yonemitsu K, Kuwata R, Shimoda H, Si L, Sohn JH, Asakawa S, Ichianagi K, Maeda K, Oh HS, Mizutani T, Kimura J, Iida A, Hondo E*. Dispersal history of *Miniopterus fuliginosus* bats and their associated viruses in east Asia. *PLoS One.* 2021 Jan 14;16(1):e0244006. doi: 10.1371/journal.pone.0244006.
- Harada M, Matsuu A, Park ES, Inoue Y, Uda A, Kaku Y, Okutani A, Posadas-Herrera G, Ishijima K, Inoue S, Maeda K. Construction of Vero cell-adapted rabies vaccine strain by five amino acid substitutions in HEP-Flury strain. *Sci Rep.* 2024 May 31;14(1):12559. doi: 10.1038/s41598-024-63337-9.
- Inoue Y, Kaku Y, Harada M, Ishijima K, Kuroda Y, Tatemoto K, Virhuez-Mendoza M, Nishino A, Yamamoto T, Inoue S, Matsuu A, Maeda K. Cross-Neutralization Activities of Antibodies against 18 Lyssavirus Glycoproteins. *Jpn J Infect Dis.* 2024 May 23;77(3):169-173. doi: 10.7883/yoken.JJID.2023.400.
- Harada M, Matsuu A, Kaku Y, Okutani A, Inoue Y, Posadas-Herrera G, Inoue S, Maeda K. Single Amino Acid Substitution in the Matrix Protein of Rabies Virus Is Associated with Neurovirulence in Mice. *Viruses.* 2024 Apr 28;16(5):699. doi: 10.3390/v16050699. PMID: 38793581; PMCID: PMC11125599.
- Inoue Y, Kaku Y, Harada M, Ishijima K, Kuroda Y, Tatemoto K, Virhuez-Mendoza M, Nishino A, Yamamoto T, Park ES, Inoue S, Matsuu A, Maeda K. Establishment of serological neutralizing tests using pseudotyped viruses for comprehensive detection of antibodies against all 18 lyssaviruses. *J Vet Med Sci.* 2024 Jan 26;86(1):128-134. doi: 10.1292/jvms.23-0463.
- Shiwa-Sudo N, Sakai Y, Iwata-Yoshikawa N, Watanabe S, Yamada S, Kuroda Y, Yamamoto T, Shirakura M, Fujisaki S, Miyazaki K, Miura H, Nagata S, Fukushi S, Maeda K, Hasegawa H, Suzuki T, Nagata N. Impact of Reinfection with SARS-CoV-2 Omicron Variants in Previously Infected Hamsters. *J Virol.* 2023 Jan 31;97(1):e0136622. doi: 10.1128/jvi.01366-22.
- Mukai Y, Horie M, Kojima S, Kawasaki J, Maeda K, Tomonaga K. An endogenous bornavirus-like nucleoprotein in miniopterid bats retains the RNA-binding properties of the original viral protein. *FEBS Lett.* 2022 Feb;596(3):323-337. doi: 10.1002/1873-3468.14290.
- Tran NTB, Shimoda H, Ishijima K, Yonemitsu K, Minami S; Supriyono, Kuroda Y, Tatemoto K, Mendoza MV, Kuwata R, Takano A, Muto M, Sawabe K, Isawa H, Hayasaka D, Maeda K*. Zoonotic Infection with Oz Virus, a Novel Thogotovirus. *Emerg Infect Dis.* 2022 Feb;28(2):436-439. doi: 10.3201/eid2802.211270.
- Kaku Y, Okutani A, Noguchi A, Inoue S, Maeda K, Morikawa S. Epitope Mapping of A Viral Propagation-Inhibiting Single-Chain Variable Fragment Against Rabies Lyssavirus Phosphoprotein. *Monoclon Antib Immunodiagn Immunother.* 2022 Feb;41(1):27-31. doi: 10.1089/mab.2021.0020.
- Nosaki Y, Maeda K, Watanabe M, Yokoi T, Iwai K, Noguchi A, Tobiume M, Satoh M, Kaku Y, Sato Y, Kato H, Okutani A, Kawahara M, Harada M, Inoue S, Maeda K, Suzuki T, Saijo M, Takayama-Ito M. Fourth imported rabies case since the eradication of rabies in Japan in 1957. *J Travel Med.* 2021 Dec 29;28(8):taab151. doi: 10.1093/jtm/taab151.

- Nabeshima K, Sato S, Kabeya H, Komine N, Nanashima R, Takano A, Shimoda H, Maeda K, Suzuki K, Maruyama S. Detection and phylogenetic analysis of Bartonella species from bat flies on eastern bent-wing bats (*Miniopterus fuliginosus*) in Japan. *Comp Immunol Microbiol Infect Dis*. 2020 Dec;73:101570. doi: 10.1016/j.cimid.2020.101570.
- Supriyono, Kuwata R, Torii S, Shimoda H, Ishijima K, Yonemitsu K, Minami S, Kuroda Y, Tatemoto K, Tran NTB, Takano A, Omatsu T, Mizutani T, Itokawa K, Isawa H, Sawabe K, Takasaki T, Yuliani DM, Abiyoga D, Hadi UK, Setiyono A, Hondo E, Agungpriyono S, Maeda K. Mosquito-borne viruses, insect-specific flaviviruses (family Flaviviridae, genus Flavivirus), Banna virus (family Reoviridae, genus Seadornavirus), Bogor virus (unassigned member of family Permutotetraviridae), and alphamesoniviruses 2 and 3 (family Mesoniviridae, genus Alphamesonivirus) isolated from Indonesian mosquitoes. *J Vet Med Sci*. 2020 Jul 31;82(7):1030-1041. doi: 10.1292/jvms.20-0261.
- Oba M, Sakaguchi S, Teshima N, Yokota T, Takemae H, Tohei M, Shimokawa F, Murakami M, Mizuno S, Ishida H, Murakami H, Takano T, Mizutani T, Tsukada H, Nagai M. Metatranscriptomic identification of novel RNA viruses from raccoon dog (*Nyctereutes procyonoides*) feces in Japan. *Sci Rep*. 2025 Feb 27;15(1):7100. doi: 10.1038/s41598-025-90474-6.
- Oba M, Imai R, Teshima N, Noda M, Nunomura Y, Kakinuma S, Ito K, Oguro M, Konaka K, Enomoto T, Morita H, Omatsu T, Nagai M, Mizutani T*. Development of Dembo-PCR for cattle in accordance with Japanese livestock quarantine guidelines. *J Vet Med Sci*. 2025 Jan 10;87(1):80-85. doi: 10.1292/jvms.24-0030.
- Oba M, Shimotori M, Teshima N, Yamaguchi L, Takemae H, Sakaguchi S, Ishida H, Murakami H, Mizutani T, Nagai M. Isolation and genetic characterization of novel bovine parechoviruses from Japanese black cattle. *Arch Virol*. 2024 Sep 16;169(10):200. doi: 10.1007/s00705-024-06120-5.
- Oba M, Shimotori M, Teshima N, Yokota T, Takemae H, Sakaguchi S, Mizuno S, Ishida H, Murakami H, Mizutani T, Nagai M. Identification of multiple inter- and intra-genotype reassortment mammalian orthoreoviruses from Japanese black cattle in a beef cattle farm. *Sci Rep*. 2024 Aug 27;14(1):19887. doi: 10.1038/s41598-024-70863-z.
- Ishida H, Nakamura M, Murakami H, Kazama K, Oba M, Takemae H, Mizutani T, Ouchi Y, Kawakami J, Tsuzuku S, Nagai M. Detection and genetic analysis of bovine rhinitis B virus in Japan. *Arch Virol*. 2024 May 16;169(6):125. doi: 10.1007/s00705-024-06046-y.
- Shizawa S, Fukuda F, Kikkawa Y, Oi T, Takemae H, Masuda T, Ishida H, Murakami, Sakaguchi S, Mizutani T, Nagai M, Oba M. Genomic diversity of group A rotaviruses from wild boars and domestic pigs in Japan: wide prevalence of NSP5 carrying the H2 genotype. *Arch Virol*. 2024 Feb;169(63). doi: 10.1007/s00705-023-05954-9.
- Maung Maung Khin ST, Sheikhi MJ, Takemae H, Mizutani T, Furuya T. First report of fesavirus 4 detection from cats in Japan. *J Vet Med Sci*. 2024 Sep 10;86(9):986-991. doi: 10.1292/jvms.24-0243.
- Okamoto A, Takemae H, Nagai M, Hashimoto S, Mizutani T, Furuya T. First report of the whole-genome sequence analysis of avian rotavirus A from Japanese chickens. *Virus Genes*. 2024 Feb;60(1):25-31. doi: 10.1007/s11262-023-02040-9.
- Komu JG, Nguyen HD, Takeda Y, Fukumoto S, Imai K, Takemae H, Mizutani T, Ogawa H. Challenges for Precise Subtyping and Sequencing of a H5N1 Clade 2.3.4.4b Highly Pathogenic Avian Influenza Virus Isolated in Japan in the 2022–2023 Season Using Classical Serological and Molecular Methods. *Viruses*. 2023 Nov 18;15(11):2274. doi: 10.3390/v15112274.
- Yoshizue T, Brindha S, Wongnak R, Takemae H, Oba M, Mizutani T, Kuroda Y. Antisera Produced Using an E. coli-Expressed SARS-CoV-2 RBD and Complemented with a Minimal Dose of Mammalian-Cell-Expressed S1 Subunit of the Spike Protein Exhibits Improved Neutralization. *Int J Mol Sci*. 2023 Jun 24;24(13):10583. doi: 10.3390/ijms241310583.
- Arai H, Takamatsu T, Lin SR, Mizutani T, Omatsu T, Katayama Y, Nakai M, Kunimi Y, Inoue MN. Diverse Molecular Mechanisms Underlying Microbe-Inducing Male Killing in the Moth *Homona magnanima*. *Appl Environ Microbiol*. 2023 May 31;89(5):e0209522. doi: 10.1128/aem.02095-22.
- Oba M, Obinata S, Takemae H, Kazama K, Oguro M, Ito K, Kakinuma S, Ishida H, Murakami H, Sakaguchi S, Mizutani T, Nagai M. Prevalence and genetic diversity in bovine parechovirus infecting Japanese cattle. *Arch Virol*. 2023 Feb 14;168(3):91. doi: 10.1007/s00705-023-05712-x.
- Kuan CY, Lin TL, Ou SC, Chuang ST, Chan JPW, Maeda K, Mizutani T, Wu MP, Lee F, Chan FT, Chang CC, Liang RL, Yang SF, Liu TC, Tu WC, Tzeng HY, Lee CJ, Lin CF, Lee HH, Wu JH, Lo HC, Tseng KC, Hsu WL, Chou CC. The First Nationwide Surveillance of Severe Fever with Thrombocytopenia Syndrome in Ruminants and Wildlife in Taiwan. *Viruses*. 2023 Feb 5;15(2):441. doi: 10.3390/v15020441.
- Doi R, Oba M, Furuya T, Mizutani T, Takemae H. Development of a new quantification method of *Sarcocystis cruzi* through detection of the acetyl-CoA synthetase gene. *J Vet Med Sci*. 2023 Jan 20;85(1):105-110. doi: 10.1292/jvms.22-0481.
- Imanishi I, Asahina R, Hayashi S, Uchiyama J, Hisasue M, Yamasaki M, Murata Y, Morikawa S, Mizutani T, Sakaguchi M. Serological study of SARS-CoV-2 antibodies in Japanese cats using protein-A/G-based ELISA. *BMC Vet Res*. 2022 Dec 21;18(1):443. *BMC Vet Res*. 2022 Dec 21;18(1):443. doi: 10.1186/s12917-022-03527-7.
- Brindha S, Yoshizue T, Wongnak R, Takemae H, Oba M, Mizutani T, Kuroda Y. An *Escherichia coli* Expressed Multi-Disulfide Bonded SARS-CoV-2 RBD Shows Native-like Biophysical Properties and Elicits Neutralizing Antisera in a Mouse Model. *Int J Mol Sci*. 2022 Dec 12;23(24):15744. doi: 10.3390/ijms232415744.
- Saito S, Hosomichi K, Polat Yamanaka M, Mizutani T, Takeshima S, Aida Y. Visualization of clonal expansion after massive depletion of cells carrying the bovine leukemia virus (BLV) integration sites during the course of disease progression in a BLV naturally-infected cow: a case report. *Retrovirology*. 2022 Nov 3;19(1):24. doi: 10.1186/s12977-022-00609-0.

- Oba M, Borjigin S, Kikuchi F, Oi T, Takemae H, Ishida H, Murakami H, Aihara N, Shiga T, Kamiie J, Mizutani T, Nagai M. First Isolation and Identification of Homologous Recombination Events of Porcine Adenovirus from Wild Boar. *Viruses*. 2022 Oct 29;14(11):2400. doi: 10.3390/v14112400.

2 プロジェクト期間中に定着された各種技術を活用し、インドネシア研究者を筆頭著者として発表した論文

- Latif, H., Pazra, D. F., Basri, C., Iryawati, D., Teguh Wibawan, I. W., & Rahayu, P. (2025). Virulence genes and phylogenetic analysis of antibiotic-resistant *Escherichia coli* isolated from pig slaughterhouses in Banten Province, Indonesia. *Veterinary World*, 18(5).
- Pahlevi, M. R., Indrawan, D., & Basri, C.* (2024). Future Prediction of Foot-And-Mouth Disease (FMD): An Industrial Perspective. *Eduvest-Journal of Universal Studies*, 4(12), 11594–11608.
- Ap triana, C. D., Sudarnika, E., Basri, C., Indrawan, D., Daryono, J., & Suseno, P. P. (2024). Assessment of the burden of rabies in one health approach control program in Ketapang District Indonesia: Using zDALY. *Preventive Medicine Reports*, 45, 102838.
- Latif, H., Pazra, D. F., Basri, C., Wibawan, I. W. T., & Rahayu, P. (2024). Whole genome sequencing analysis on antibiotic-resistant *Escherichia coli* isolated from pig farms in Banten Province, Indonesia. *Journal of Veterinary Science*, 25(3), e44.
- Sekarsana, D. A., Basri, C., & Lukman, D. W. (2024). Detection of Foot and Mouth Disease Virus in Salted Raw Cowhide from Malaysia in Tanjung Priok Port, Indonesia. *Jurnal Medik Veterinar*, 7(1).
- Pazra, D. F., Latif, H., Basri, C., Wibawan, I. W. T., & Rahayu, P. (2023). Detection of tetracycline resistance genes and their diversity in *Escherichia coli* isolated from pig farm waste in Banten province, Indonesia. *Veterinary World*, 16(9), 1907.
- Pazra, D. F., Latif, H., Basri, C., Wibawan, I. W. T., & Rahayu, P. (2023). Distribution analysis of tetracycline resistance genes in *Escherichia coli* isolated from floor surface and effluent of pig slaughterhouses in Banten Province, Indonesia. *Veterinary World*, 16(3), 509.
- Kustiningsih, H., Sudarnika, E., Basri, C., & Sudarwanto, M. (2023). Dairy farmers' knowledge, attitudes, and practices regarding the brucellosis surveillance and control program in Bogor, Indonesia. *Veterinary World*, 16(1), 126.
- Pisestiyani, H., Permana, I., Basri, C., Lukman, D. W., & Sudarwanto, M. (2023). An Evaluation of Draminski Detector as an Early Detection Tool for Subclinical Mastitis in Dairy Cattle in Pondok Ranggon Farm. *Jurnal Medik Veteriner*, 6(1), 6–14.
- Muhamad, K. Y., Purnawarman, T., & Basri, C.* (2023). Knowledge of employee about zoonoses-associated with reptiles in a business units that imports and sells exotic reptiles in Indonesia. *Adv. Anim. Vet. Sci*, 11(12), 2060–2066.
- Kustiningsih, H., Sudarnika, E., Saleh, A., Basri, C., & Sudarwanto, M. (2023). The Role of Dairy Farmers in Surveillance and Control Program of Brucellosis in Bogor Regency. *Jurnal Sain Veteriner*, 41(1), 51–62.
- Ap triana, C. D., Sudarnika, E., & Basri, C.* (2022). Nationally and locally-initiated One Health approach in controlling rabies in West Kalimantan, Indonesia. *Veterinary World*, 15(12), 2953.
- Primatika, R. A., Sudarnika, E., Sumiarto, B., & Basri, C.* (2022). Estimation of the probability risks of African swine fever outbreaks using the maximum entropy method in North Sumatra Province, Indonesia. *Veterinary World*, 15(7), 1814.
- Primatika, R. A., Sudarnika, E., Sumiarto, B., & Basri, C.* (2022). Cartographical analysis and anthropogenic risk factor of African swine fever outbreak in North Sumatra, Indonesia on 2019–2020. *Veterinary Practitioner*, 23.
- Wahyuni, D. S., Latif, H., Sudarwanto, M. B., Basri, C., & Thong, D. (2022). An investigation of heavy metals in edible bird's nest from Indonesia using inductively coupled plasma mass spectrometry. *Veterinary World*, 15(2), 509.
- Syarifah, I. K., Latif, H., Basri, C., & Rahayu, P. (2020). Identification and differentiation of *Campylobacter* isolated from chicken meat using real-time polymerase chain reaction and high resolution melting analysis of *hipO* and *glyA* genes. *Veterinary World*, 13(9), 1875.
- Fadillah, A., van den Borne, B. H. P., Schukken, Y. H., Poetri, O. N., & Hogeveen, H. (2025). Cost-efficiency of mastitis control strategies on smallholder dairy farms. *Journal of Dairy Science*.
- Yasa, I. W. W., Wibawan, I. W. T., & Poetri, O. N.* (2025). Pathogenicity and immunogenicity study of infectious bursal disease 098 Bogor'19 virus isolate as a master seed candidate for live IBD vaccine. *Adv. Anim. Vet. Sci.*, 13(3), 565–572.
- Satrija, E. C., Murtini, S., Wibawan, I. W. T., & Poetri, O. N.* (2025). The relevance of two-doses of foot-and-mouth disease (FMD) virus vaccine on immune response in beef cattle. *Adv. Anim. Vet. Sci.*, 13(1), 103–107.
- Poetri, O. N., Nugroho, C. M. H., Silaen, O. S. M., Kurnia, R. S., Krisnamurti, D. G. B., Indrawati, A., ... & Soebandrio, A. (2023). Potential of Neuraminidase from *Pasteurella multocida* for Inhibiting Avian Influenza Virus Subtype H9N2 Replication In Ovo. *Tropical Animal Science Journal*, 46(4), 487–493.
- Fadillah, A., van den Borne, B. H., Poetri, O. N., Hogeveen, H., Slijper, T., Pisestiyani, H., & Schukken, Y. H. (2023). Evaluation of factors associated with bulk milk somatic cell count and total plate count in Indonesian smallholder dairy farms. *Frontiers in Veterinary Science*, 10, 1280264.
- Fadillah, A., van den Borne, B. H., Poetri, O. N., Hogeveen, H., Umberger, W., Hetherington, J., & Schukken, Y. H. (2023). Smallholder milk-quality awareness in Indonesian dairy farms. *Journal of Dairy Science*, 106(11), 7965–7973.
- Pramuwidyatama, M. G., Indrawan, D., Boeters, M., Poetri, O. N., Saatkamp, H. W., & Hogeveen, H. (2023). Economic impact of highly pathogenic avian influenza outbreaks in Western Java smallholder broiler farms. *Preventive Veterinary Medicine*, 212, 105833.

- Putri, D. D., Poetri, O. N., Candra, A. A., & Soejoedono, R. D. (2022). Production of hyperimmune serum against genotype VII Newcastle disease virus in rabbits with several applications. *Journal of Advanced Veterinary and Animal Research*, 9(2), 211.
- Suryaman, G. K., Soejoedono, R. D., Poetri, O. N., Setiyono, A., & Handharyani, E. (2021). Detection of infectious bronchitis-like virus isolated from psittacines at breeding facilities. *Biodiversitas Journal of Biological Diversity*, 22(10).
- Nugroho, C. M. H., Silaen, O. S. M., Kurnia, R. S., Soejoedono, R. D., Poetri, O. N., & Soebandrio, A. (2021). Isolation and molecular characterization of the hemagglutinin gene of H9N2 avian influenza viruses from poultry in Java, Indonesia. *Journal of Advanced Veterinary and Animal Research*, 8(3), 423.
- Saputri, M. E., Poetri, O. N., & Soejoedono, R. D. (2021). Phylogenetic studies of Newcastle disease virus isolated from poultry flocks in South Sulawesi Province, Indonesia, in 2019. *Journal of Advanced Veterinary and Animal Research*, 8(1), 129.
- Rizkiantino, R., Wibawan, I. W. T., Pasaribu, F. H., Soejoedono, R. D., Poetri, O. N., Arnafia, W., ... & Reisinta, D. (2020). The potential of adjuvant against production of antistreptococcal immunoglobulin Y (IgY) in aquaculture. *Jurnal Kedokteran Hewan – Indonesian Journal of Veterinary Sciences*, 14(3).
- Dewi, R. S., Damajanti, R., Wardhana, A. H., Mulatsih, S., Poetri, O. N., Steeneveld, W., & Hogeveen, H. (2020). The Economic Losses of Surra Outbreak in Sumba Timur, Nusa Tenggara Timur-Indonesia. *Tropical Animal Science Journal*, 43(1), 77–85.
- Jerica, M. S., Tiuria, R., Mayasari, N. L. P. I., Nugraha, A. B., & Subangkit, M. (2024). Goblet cell hypertrophy in small intestines of free-range chicken in Jakarta traditional market infected with cestode worms. *Current Biomedicine*, 2(2), 93–100.
- Agistiana, S., Wibawan, I. W. T., Mayasari, N. L. P. I., Nuradji, H., & Setiyaningsih, S. (2024). Genetic analysis of African swine fever virus originating from pork products in Indonesia. *Adv. Anim. Vet. Sci.*, 12(9), 1829–1835.
- Putri, D. D., Nurhayati, N., Habsari, I. K., Mayasari, N. L. P. I.* (2023). Comparison of two set pathotypic-specific primers to detect Newcastle disease virus. *Research Article*, 11(12), 1978–1985.
- Juwita, S., Indrawati, A., Damajanti, R., Safika, S., Mayasari, N. L. P. I.* (2022). Genetic relationship of *Staphylococcus aureus* isolated from humans, animals, environment, and Dangke products in dairy farms of South Sulawesi Province, Indonesia. *Veterinary World*, 15(3), 558.
- Budiono, D., Rinendyaputri, R., Noviantari, A., Fahrudin, M., Mayasari, N. L. P. I., Budiariati, V., ... & Boediono, A. (2022). Improvement of mouse parthenogenetic blastocyst as primary colony source of parthenogenetic embryonic stem cell (pESC) using CHIR99021. *Adv. Anim. Vet. Sci.*, 10(5), 1127–1134.
- Bai, J., Kondo, R., Mayasari, N. I., Shigeoka, T., Isotani, A., Ikawa, M., ... & Ishida, Y. (2020). Diphtheria toxin - mediated transposon - driven poly (A) - trapping efficiently disrupts transcriptionally silent genes in embryonic stem cells. *Genesis*, 58(9), e23386.
- Prawira, A. Y., Supratikno, Anwar, S., Khaerunnisa, I., Furqon, A., Novelina, S., & Prihatin, K. W. (2024). Preliminary examination of the histochemistry of the semitendinosus muscle microstructure in Bali cattle (*Bos javanicus*) and the correlations with muscle score. *Anatomia, Histologia, Embryologia*, 53(2), e13018.
- Cahyadi, D. D., Nurhidayat, N., Supratikno, S., Novelina, S., Setijanto, H., & Agungpriyono, S. (2022). Musculoskeletal structure of the shoulder and arm in large flying fox (*Pteropus vampyrus*). *Biodiversitas Journal of Biological Diversity*, 23(11).
- AbuEed, L., Miyake, A., Wanjala, N., Pramono, D., Abdillah, D., Imamura, M., ... & Nishigaki, K. (2025). Riboflavin transporter: Evidence of a role as entry receptor for chimpanzee endogenous retrovirus. *Virus Evolution*, 11(1).
- Pramono, D., Muto, Y., Shimazu, Y., Deshapriya, R. M. C., Makundi, I., Arnal, M., ... & Nishigaki, K. (2024). Endogenous retrovirus ERV-DC8 highly integrated in domestic cat populations is a replication-competent provirus. *Biochemical and Biophysical Research Communications*, 738, 150521.
- Pramono, D., Sugimoto, K., Kimura, T., Miyake, A., & Nishigaki, K. (2024). Characterization of the endogenous retrovirus - derived placenta - specific soluble protein Env V-Fca from domestic cats. *FEBS Letters*, 598(14), 1792–1806.
- Pramono, D., Takeuchi, D., Katsuki, M., AbuEed, L., Abdillah, D., Kimura, T., ... & Nishigaki, K. (2024). FeLIX is a restriction factor for mammalian retrovirus infection. *Journal of Virology*, 98(4), e01771-23.
- Ngo, M. H., AbuEed, L., Kawasaki, J., Oishi, N., Pramono, D., Kimura, T., ... & Nishigaki, K. (2024). Multiple recombination events between endogenous retroviral elements and feline leukemia virus. *Journal of Virology*, 98(2), e01400-23.
- Tarigan, R., Satrija, F., Atabany, A., Queen, Y., & Suprayogi, A. (2025). Hematological Profile of Beef Cattle After Consuming Concentrate Feed Supplemented with Depolarized Katuk Leaf (Fedtugrow®) in Local Farmers. *Jurnal Ilmu Pertanian Indonesia*, 30(1), 146–152.
- Tarigan, S., Sekarmila, G., Apas, Sumarningsih, Tarigan, R., Putri, R., & Setyawati, D. R. (2024). Challenges and strategies in the soluble expression of CTA1-(S14P5)₄-DD and CTA1-(S21P2)₄-DD fusion proteins as candidates for COVID-19 intranasal vaccines. *PloS One*, 19(12), e0306153.
- Tarigan, R. (2023). The uniqueness of bats as natural host of viruses and their implication to global health. *WARTAZOA. Indonesian Bulletin of Animal and Veterinary Sciences*, 32(4).
- Novianto, D., Hadi, U. K., Soviana, S., Supriyono, S., Kaewthamasorn, M., & Darusman, H. S. (2025). Modeling of the habitat characteristics and ecological niche of the Asian tiger mosquito in a fine - scale area of a primate research center using the maximum entropy model. *Zoonoses and Public Health*, 72(2), 136–149.
- Saputra, F. R., Wahid, I., Supriyono, S., & Hadi, U. K. (2025). Abundance of adult *Aedes aegypti* and *Ae. albopictus* (Diptera:

Culicidae) across six settlements in South Sulawesi, Indonesia. Biodiversitas Journal of Biological Diversity, 26(1).

- Hairani, B., Hadi, U. K., & Supriyono, S*. (2023). Species diversity and daily infestation patterns of haematophagous flies in cattle farms at Tanah Bumbu District, South Kalimantan Province, Indonesia. Biodiversitas Journal of Biological Diversity, 24(5).
- Sophia, H. F., Supriyono, S., Soviana, S., Novianto, D., & Hadi, U. K. (2023). Molecular detection of *Borrelia* spp. (Spirochaetales: Borreliaceae) in ticks (Acari: Ixodidae) collected from tortoises in Java, Indonesia. Biodiversitas Journal of Biological Diversity, 24(12).
- Novianto, D., Hadi, U. K., Soviana, S., Supriyono, S., Rosmanah, L., & Darusman, H. S. (2022). Diversity of mosquito species and potential arbovirus transmission in long-tailed macaque (*Macaca fascicularis*) breeding facilities. Veterinary World, 15(8), 1961.
- Ningrum, S. G., Khaerunnisa, I., Supriyono, S., & Wibawan, I. W. T. (2022). Molecular detection and phylogenetic analysis of a Shiga toxin-producing strain *Escherichia coli* (partial *rfbE* and *fliCh7* gene), serotype O157:H7 isolated from a living chicken of a traditional market in Indonesia. Bulgarian Journal of Veterinary Medicine 25(3):500-506

³ インドネシアのボゴール農業大学 (IPB University) と Indonesia One Health University Network (INDOHUN) が共同で設立した、世界初の「アグロマリタイム (農業・海洋) 分野におけるグローバルヘルスと One Health (ワンヘルス)」を統合的に推進する研究・協力拠点

以上