

Jussi Hepojoki
University Researcher, Supervisor for doctoral programme
Department of Virology
Helsinki One Health (HOH)
Viral Zoonosis Research Unit
Doctoral Programme in Microbiology and Biotechnology
Doctoral Programme in Biomedicine
Doctoral Programme in Clinical Veterinary Medicine



Type of address: Postal address.

PL 21 (Haartmaninkatu 3)
00014
Finland

Type of address: Postal address.

Finland

Email: jussi.hepojoki@helsinki.fi

Mobile: +358504482866

Phone: +358294126608

Publications

Haemolymphatic tissues of captive boa constrictor (*Boa constrictor*): Morphological features in healthy individuals and with boid inclusion body disease

Dervas, E., Michalopoulou, E., Hepojoki, J. M., Thiele, T., Baggio, F., Hetzel, U. & Kipar, A. M., Jan 2025, In: *Developmental and Comparative Immunology*. 162, 20 p., 105302.

Cell culture co- and superinfection experiments suggest that transmission during captivity contributes to the presence of reptarenavirus S and L segment swarms in boid inclusion body disease-positive snakes

Lintala, A., Szivoczka, L., Sander, W., Ekström, E. J., Kipar, A., Hetzel, U. & Hepojoki, J., 11 Dec 2024, In: *Journal of General Virology*. 105, 12, 17 p.

Convalescent plasma therapy for COVID-19 – Donor selection strategies and establishment of a plasma bank

Kajova, M., Khawaja, T., Levonen, I., Pietilä, J.-P., Virtanen, J., Pakkanen, S. H., Välimaa, H., Nousiainen, A., Hepojoki, J., Sironen, T., Vierikko, A., Ihalainen, J., Vapalahti, O. & Kantele, A., Dec 2024, In: *New Microbes and New Infections*. 62, 9 p., 101525.

SARS-CoV-2 NSP16 promotes IL-6 production by regulating the stabilization of HIF-1 α

Mou, X., Luo, F., Zhang, W., Cheng, Q., Hepojoki, J., Zhu, S., Liu, Y., Xiong, H., Guo, D., Yu, J., Chen, L., Li, Y., Hou, W. & Chen, S., Dec 2024, In: *Cellular Signalling*. 124, 13 p., 111387.

Multifocal cutaneous neoplastic vascular proliferations in a rainbow boa (*Epicrates cenchria*) collection with boid inclusion body disease

Ferreira, A. B., Fonteque, J. H., Withoef, J. A., Casagrande, R. A., da Costa, U. M., Imkamp, F., Göller, P., Baggio, F., Hepojoki, J., Hetzel, U. & Kipar, A., Nov 2024, In: *PLoS One*. 19, 11, 18 p., e0311015.

Circulating mucosal-like IgA responses increase with severity of Puumala orthohantavirus-caused hemorrhagic fever with renal syndrome

Cabrera, L. E., Buckner, C., Then, V., Mäki, S., Vapalahti, O., Vaheri, A., Hepojoki, J., Tietäväinen, J., Mäkelä, S., Mustonen, J. & Strandin, T., 24 Oct 2024, In: *Frontiers in Immunology*. 15, 15 p., 1480041.

Ancestral allele of DNA polymerase gamma modifies antiviral tolerance

Kang, Y., Hepojoki, J., Maldonado, R. S., Mito, T., Terzioglu, M., Manninen, T., Kant, R., Singh, S., Othman, A., Verma, R., Uusimaa, J., Wartiovaara, K., Kareinen, L., Zamboni, N., Nyman, T. A., Paetau, A., Kipar, A., Vapalahti, O. & Suomalainen, A., 3 Apr 2024, In: *Nature*. 628, p. 844–853 10 p.

Whole Blood as a Sample Matrix in Homogeneous Time-Resolved Assay—Förster Resonance Energy Transfer-Based Antibody Detection

Lintala, A., Vapalahti, O., Nousiainen, A., Kantele, A. & Hepojoki, J., Apr 2024, In: *Diagnostics*. 14, 7, 11 p., 720.

Comparative analysis of human, rodent and snake deltavirus replication

Khalfi, P., Denis, Z., McKellar, J., Merolla, G., Chavey, C., Ursic-Bedoya, J., Soppa, L., Szirovicza, L., Hetzel, U., Dufourt, J., Leyrat, C., Goldmann, N., Goto, K., Verrier, E., Baumert, T. F., Glebe, D., Cournaud, V., Gregoire, D., Hepojoki, J. & Majzoub, K., Mar 2024, In: PLoS Pathogens. 20, 3, 30 p., e1012060.

Nanobody engineering for SARS-CoV-2 neutralization and detection

Hannula, L., Kuivanen, S., Lasham, J., Kant, R., Kareinen, L., Bogacheva, M., Strandin, T., Sironen, T., Hepojoki, J., Sharma, V., Saviranta, P., Kipar, A., Vapalahti, O., Huiskonen, J. T. & Rissanen, I., Feb 2024, In: Microbiology Spectrum. 12, 4, 18 p.

A Multiplex RT-PCR Method for the Detection of Reptarenavirus Infection

Baggio, F., Hetzel, U., Praehauser, B., Dervas, E., Michalopoulou, E., Thiele, T., Kipar, A. & Hepojoki, J., Dec 2023, In: Viruses (Basel). 15, 12, 21 p., 2313.

ICTV Virus Taxonomy Profile: Arenaviridae 2023

Radoshitzky, S. R., Buchmeier, M. J., Charrel, R. N., Gonzalez, J.-P. J., Günther, S., Hepojoki, J., Kuhn, J. H., Lukashevich, I. S., Romanowski, V., Salvato, M. S., Sironi, M., Stenglein, M. D. & de la Torre, J. C., 13 Sept 2023, In: Journal of General Virology. 104, 9, 2 p., 001891.

Image-based and machine learning-guided multiplexed serology test for SARS-CoV-2

Pietiäinen, V., Polso, M., Migh, E., Guckelsberger, C., Harmati, M., Diosdi, A., Turunen, L., Hassinen, A., Potdar, S., Koponen, A., Sebestyén, E. G., Kovacs, F., Kriston, A., Hollandi, R., Burian, K., Terhes, G., Visnyovszki, A., Fodor, E., Lacza, Z. & Kantele, A. & 12 others, Kolehmainen, P., Kakkola, L., Strandin, T., Levanov, L., Kallioniemi, O., Kemeny, L., Julkunen, I., Vapalahti, O., Buzas, K., Paavolainen, L., Horvath, P. & Hepojoki, J., 28 Aug 2023, In: Cell Reports Methods. 3, 8, 20 p., 100565.

The Relationship Between SARS-CoV-2 Neutralizing Antibody Titers and Avidity in Plasma Collected From Convalescent nonvaccinated and Vaccinated Blood Donors

Nurmi, V., Knight, C., Estcourt, L., Hepojoki, J., Lamikanra, A. A., Tsang, H. P., Roberts, D. J., Polack, F. P., Simmonds, P., Hedman, K., Alvarez-Paggi, D. & Harvala, H., 11 Aug 2023, In: Journal of Infectious Diseases. 228, 3, p. 245-250 6 p.

Reptarenavirus S Segment RNA Levels Correlate with the Presence of Inclusion Bodies and the Number of L Segments in Snakes with Reptarenavirus Infection-Lessons Learned from a Large Breeding Colony

Thiele, T., Baggio, F., Praehauser, B., Subira, A. R., Michalopoulou, E., Kipar, A., Hetzel, U. & Hepojoki, J., Jun 2023, In: Microbiology Spectrum. 11, 3, 16 p., e0506522.

Risk of lymphoid malignancies increased after Puumala virus infection in Finland, 2009-2019: A retrospective register-based cohort study

Kääriäinen, S., Ollgren, J., Dub, T., Laine, O., Sinisalo, M., Hepojoki, J., Strandin, T., Kekäläinen, E., Sane, J. & Lyytikäinen, O., Jun 2023, In: International Journal of Infectious Diseases. 131, p. 1-6 6 p.

Intranasal administration of adenoviral vaccines expressing SARS-CoV-2 spike protein improves vaccine immunity in mouse models

Freitag, T. L., Fagerlund, R., Karam, N. L., Leppänen, V.-M., Ugurlu, H., Kant, R., Mäkinen, P., Tawfek, A., Kumar Jha, S., Strandin, T., Leskinen, K., Hepojoki, J., Kesti, T., Kareinen, L., Kuivanen, S., Koivulehto, E., Sormunen, A., Laidinen, S., Khattab, A. & Saavalainen, P. & 7 others, Meri, S., Kipar, A., Sironen, T., Vapalahti, O., Alitalo, K., Ylä-Herttuala, S. & Saksela, K., 11 May 2023, In: Vaccine. 41, 20, p. 3233-3246 14 p.

SARS-CoV-2 and type 1 diabetes in children in Finland: an observational study

Finnish Pediatric Diabetes Register, Knip, M., Parviainen, A., Turtinen, M., But, A., Härkönen, T., Hepojoki, J., Sironen, T., Iheozor-Ejiofor, R., Ugurlu, H., Saksela, K., Lempainen, J., Ilonen, J. & Vapalahti, O., Apr 2023, In: The Lancet diabetes & endocrinology. 11, 4, p. 251-260 10 p.

Intranasal trimeric sherpabody inhibits SARS-CoV-2 including recent immunoevasive Omicron subvariants

Mäkelä, A. R., Ugurlu, H., Hannula, L., Kant, R., Salminen, P., Fagerlund, R., Mäki, S., Haveri, A., Strandin, T., Kareinen, L., Hepojoki, J., Kuivanen, S., Levanov, L., Pasternack, A., Naves, R. A., Ritvos, O., Österlund, P., Sironen, T., Vapalahti,

O. & Kipar, A. & 3 others, Huiskonen, J. T., Rissanen, I. & Saksela, K., 24 Mar 2023, In: Nature Communications. 14, 1, 12 p., 1637.

Puumala Hantavirus Infections Show Extensive Variation in Clinical Outcome

Vaheri, A., Smura, T., Vauhkonen, H., Hepojoki, J., Sironen, T., Strandin, T., Tietäväinen, J., Outinen, T., Mäkelä, S., Pörsti, I. & Mustonen, J., Mar 2023, In: Viruses-Basel. 15, 3, 9 p., 805.

2022 taxonomic update of phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales

Kuhn, J. H., Adkins, S., Alkhovsky, S., Avsic-Zupanc, T., Ayllon, M. A., Bahl, J., Balkema-Buschmann, A., Ballinger, M. J., Bandte, M., Beer, M., Bejerman, N., Bergeron, E., Biedenkopf, N., Bigarre, L., Blair, C. D., Blasdel, K. R., Bradfute, S. B., Briese, T., Brown, P. A. & Bruggmann, R. & 161 others, Buchholz, U. J., Buchmeier, M. J., Bukreyev, A., Burt, F., Buettner, C., Calisher, C. H., Candresse, T., Carson, J., Casas, I., Chandran, K., Charrel, R. N., Chiaki, Y., Crane, A., Crane, M., Dacheux, L., Dal Bo, E., de la Torre, J. C., de Lamballerie, X., de Souza, W. M., de Swart, R. L., Dheilly, N. M., Di Paola, N., Di Serio, F., Dietzgen, R. G., Digiario, M., Drexler, J. F., Duprex, W. P., Duerrwald, R., Easton, A. J., Elbeaino, T., Ergunay, K., Feng, G., Feuvrier, C., Firth, A. E., Fooks, A. R., Formenty, P. B. H., Freitas-Astua, J., Gago-Zachert, S., Garcia, M. L., Garcia-Sastre, A., Garrison, A. R., Godwin, S. E., Gonzalez, J.-P. J., de Bellocq, J. G., Griffiths, A., Groschup, M. H., Gunther, S., Hammond, J., Hepojoki, J., Hierweger, M. M., Hongo, S., Horie, M., Horikawa, H., Hughes, H. R., Hume, A. J., Hyndman, T. H., Jiang, D., Jonson, G. B., Junglen, S., Kadono, F., Karlin, D. G., Klempa, B., Klingstrom, J., Koch, M. C., Kondo, H., Koonin, E., Krasova, J., Krupovic, M., Kubota, K., Kuzmin, I., Laenen, L., Lambert, A. J., Li, J., Li, J.-M., Liefbrig, F., Lukashovich, I. S., Luo, D., Maes, P., Marklewitz, M., Marshall, S. H., Marzano, S.-Y. L., McCauley, J. W., Mirazimi, A., Mohr, P. G., Moody, N. J. G., Morita, Y., Morrison, R. N., Muhlberger, E., Naidu, R., Natsuaki, T., Navarro, J. A., Neriya, Y., Netesov, S., Neumann, G., Nowotny, N., Ochoa-Corona, F. M., Palacios, G., Pallandre, L., Pallas, V., Papa, A., Paraskevopoulou, S., Parrish, C. R., Pauvolid-Correa, A., Paweska, J. T., Perez, D. R., Pfaf, F., Plemper, R. K., Postler, T. S., Pozet, F., Radoshitzky, S. R., Ramos-Gonzalez, P. L., Rehanek, M., Resende, R. O., Reyes, C. A., Romanowski, V., Rubbenstroth, D., Rubino, L., Rumbou, A., Runstadler, J. A., Rupp, M., Sabanadzovic, S., Sasaya, T., Schmidt-Posthaus, H., Schwemmle, M., Seuberlich, T., Sharpe, S. R., Shi, M., Sironi, M., Smither, S., Song, J.-W., Spann, K. M., Spengler, J. R., Stenglein, M. D., Takada, A., Tesh, R. B., Tesikova, J., Thornburg, N. J., Tischler, N. D., Tomitaka, Y., Tomonaga, K., Tordo, N., Tsunekawa, K., Turina, M., Tzanetakis, I. E., Vaira, A. M., van den Hoogen, B., Vanmechelen, B., Vasilakis, N., Verbeek, M., von Bargen, S., Wada, J., Wahl, V., Walker, P. J., Whitfield, A. E., Williams, J., Wolf, Y., Yamasaki, J., Yanagisawa, H., Ye, G., Zhang, Y.-Z. & Okland, A. L., Dec 2022, In: Archives of Virology. 167, 12, p. 2857–2906 50 p.

Boid Inclusion Body Disease Is Also a Disease of Wild Boa Constrictors

Alfaro-Alarcon, A., Hetzel, U., Smura, T., Baggio, F., Alberto Morales, J., Kipar, A. & Hepojoki, J., 26 Oct 2022, In: Microbiology Spectrum. 10, 5, 17 p., e0170522.

Persistent Reptarenavirus and Hartmanivirus Infection in Cultured Boid Cells

Lintala, A., Szivovicza, L., Kipar, A., Hetzel, U. & Hepojoki, J., Aug 2022, In: Microbiology Spectrum. 10, 4, 18 p., e0158522.

Clinical and Serological Findings of COVID-19 Participants in the Region of Makkah, Saudi Arabia

Alzahrani, O. R., Alanazi, A. D., Kareinen, L., Hawsawi, Y. M., Alhadrami, H. A., Khogeer, A. A., Alatiwi, H. E., Alharbi, A. A., Sironen, T., Vapalahti, O., Hepojoki, J. & Zakham, F., Jul 2022, In: Diagnostics. 12, 7, 11 p., 1725.

Neutralizing Antibody Titers in Hospitalized Patients with Acute Puumala Orthohantavirus Infection Do Not Associate with Disease Severity

Iheozor-Ejiofor, R., Vapalahti, K., Sironen, T., Levanov, L., Hepojoki, J., Lundkvist, Å., Mäkelä, S., Vaheri, A., Mustonen, J., Plyusnin, A., Strandin, T. M. & Vapalahti, O., May 2022, In: Viruses (Basel). 14, 5, 15 p., 901.

New-onset type 1 diabetes in Finnish children during the COVID-19 pandemic

Salmi, H., Heinonen, S., Hästbacka, J., Lääperi, M., Rautiainen, P., Miettinen, P. J., Vapalahti, O., Hepojoki, J. & Knip, M., May 2022, In: Archives of Disease in Childhood. 107, 2, p. 180-185 6 p.

Short '1.2x Genome' Infectious Clone Initiates Kolmiovirid Replication in Boa constrictor Cells

Szivovicza, L., Hetzel, U., Kipar, A. & Hepojoki, J., Jan 2022, In: Viruses (Basel). 14, 1, 21 p., 107.

2021 Taxonomic update of phylum Negamaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales

Kuhn, J. H., Adkins, S., Agwanda, B. R., Al Kubrusli, R., Alkhovsky, S. V., Amarasinghe, G. K., Avsic-Zupanc, T., Ayllon, M. A., Bahl, J., Balkema-Buschmann, A., Ballinger, M. J., Basler, C. F., Bavari, S., Beer, M., Bejerman, N., Bennett, A. J., Bente, D. A., Bergeron, E., Bird, B. H. & Blair, C. D. & 231 others, Blasdell, K. R., Blystad, D.-R., Bojko, J., Borth, W. B., Bradfute, S., Breyta, R., Briese, T., Brown, P. A., Brown, J. K., Buchholz, U. J., Buchmeier, M. J., Bukreyev, A., Burt, F., Buettner, C., Calisher, C. H., Cao, M., Casas, I., Chandran, K., Charrel, R. N., Cheng, Q., Chiaki, Y., Chiapello, M., Choi, I.-R., Ciuffo, M., Clegg, J. C. S., Crozier, I., Dal Bo, E., de la Torre, J. C., de Lamballerie, X., de Swart, R. L., Debat, H., Dheilly, N. M., Di Cicco, E., Di Paola, N., Di Serio, F., Dietzgen, R. G., Digiaro, M., Dolnik, O., Drebot, M. A., Drexler, J. F., Dundon, W. G., Duprex, W. P., Durrwald, R., Dye, J. M., Easton, A. J., Ebihara, H., Elbeaino, T., Ergunay, K., Ferguson, H. W., Fooks, A. R., Forgia, M., Formenty, P. B. H., Franova, J., Freitas-Astua, J., Fu, J., Fuerl, S., Gago-Zachert, S., Gao, G. F., Garcia, M. L., Garcia-Sastre, A., Garrison, A. R., Gaskin, T., Gonzalez, J.-P. J., Griffiths, A., Goldberg, T. L., Groschup, M. H., Guenther, S., Hall, R. A., Hammond, J., Han, T., Hepojoki, J., Hewson, R., Hong, J., Hong, N., Hongo, S., Horie, M., Hu, J. S., Hu, T., Hughes, H. R., Huettner, F., Hyndman, T. H., Ilyas, M., Jalkanen, R., Jiang, D., Jonson, G. B., Junglen, S., Kadono, F., Kaukinen, K. H., Kawate, M., Klempa, B., Klingstrom, J., Kobinger, G., Koloniuk, I., Kondo, H., Koonin, E. V., Krupovic, M., Kubota, K., Kurath, G., Laenen, L., Lambert, A. J., Langevin, S. L., Lee, B., Lefkowitz, E. J., Leroy, E. M., Li, S., Li, L., Li, J., Liu, H., Lukashevich, I. S., Maes, P., de Souza, W. M., Marklewitz, M., Marshall, S. H., Marzano, S.-Y. L., Massart, S., McCauley, J. W., Melzer, M., Mielke-Ehret, N., Miller, K. M., Ming, T. J., Mirzami, A., Mordecai, G. J., Muehlbach, H.-P., Muehlberger, E., Naidu, R., Natsuaki, T., Navarro, J. A., Netesov, S. V., Neumann, G., Nowotny, N., Nunes, M. R. T., Olmedo-Velarde, A., Palacios, G., Pallas, V., Palyi, B., Papa, A., Paraskevopoulou, S., Park, A. C., Parrish, C. R., Patterson, D. A., Pauvolid-Correa, A., Paweska, J. T., Payne, S., Peracchio, C., Perez, D. R., Postler, T. S., Qi, L., Radoshitzky, S. R., Resende, R. O., Reyes, C. A., Rima, B. K., Luna, G. R., Romanowski, V., Rota, P., Rubbenstroth, D., Rubino, L., Runstadler, J. A., Sabanadzovic, S., Sall, A. A., Salvato, M. S., Sang, R., Sasaya, T., Schulze, A. D., Schwemmler, M., Shi, M., Shi, X., Shi, Z., Shimamoto, Y., Shirako, Y., Siddell, S. G., Simmonds, P., Sironi, M., Smagghe, G., Smither, S., Song, J.-W., Spann, K., Spengler, J. R., Stenglein, M. D., Stone, D. M., Sugano, J., Suttle, C. A., Tabata, A., Takada, A., Takeuchi, S., Tchouassi, D. P., Teffer, A., Tesh, R. B., Thornburg, N. J., Tomitaka, Y., Tomonaga, K., Tordo, N., Torto, B., Towner, J. S., Tsuda, S., Tu, C., Turina, M., Tzanetakis, I. E., Uchida, J., Usugi, T., Vaira, A. M., Vallino, M., van den Hoogen, B., Varsani, A., Vasilakis, N., Verbeek, M., von Bargen, S., Wada, J., Wahl, V., Walker, P. J., Wang, L.-F., Wang, G., Wang, Y., Wang, Y., Waqas, M., Wei, T., Wen, S., Whitfield, A. E., Williams, J. V., Wolf, Y. I., Wu, J., Xu, L., Yanagisawa, H., Yang, C., Yang, Z., Zerbini, F. M., Zhai, L., Zhang, Y.-Z., Zhang, S., Zhang, J., Zhang, Z. & Zhou, X., Dec 2021, In: Archives of Virology. 166, 12, p. 3513-3566 54 p.

A subpopulation of arenavirus nucleoprotein localizes to mitochondria

Baggio, F., Hetzel, U., Nufer, L., Kipar, A. & Hepojoki, J., 26 Oct 2021, In: Scientific Reports. 11, 1, 19 p., 21048.

Hantavirus infection-induced B cell activation elevates free light chains levels in circulation

Hepojoki, J., Cabrera, L. E., Hepojoki, S., Bellomo, C., Kareinen, L., Andersson, L. C., Vaheri, A., Mäkelä, S., Mustonen, J., Vapalahti, O., Martinez, V. & Strandin, T., Aug 2021, In: PLoS Pathogens. 17, 8, 21 p., 1009843.

COVID-19 mRNA vaccine induced antibody responses against three SARS-CoV-2 variants

Jalkanen, P., Kolehmainen, P., Häkkinen, H. K., Huttunen, M., Tähtinen, P. A., Lundberg, R., Maljanen, S., Reinholm, A., Tauriainen, S., Pakkanen, S. H., Levonen, I., Nousiainen, A., Miller, T., Välimaa, H., Ivaska, L., Pasternack, A., Naves, R., Ritvos, O., Österlund, P. & Kuivanen, S. & 7 others, Smura, T., Hepojoki, J., Vapalahti, O., Lempainen, J., Kakkola, L., Kantele, A. & Julkunen, I., 28 Jun 2021, In: Nature Communications. 12, 1, 11 p., 3991.

Kinetics of neutralizing antibodies of covid-19 patients tested using clinical d614g, b.1.1.7, and b.1.351 isolates in microneutralization assays

Virtanen, J., Uusitalo, R., Korhonen, E. M., Aaltonen, K., Smura, T., Kuivanen, S., Pakkanen, S. H., Mero, S., Patjas, A., Riekkinen, M., Kantele, A., Nurmi, V., Hedman, K., Hepojoki, J., Sironen, T., Huhtamo, E. & Vapalahti, O., Jun 2021, In: Viruses (Basel). 13, 6, 9 p., 996.

A Generic, Scalable, and Rapid Time-Resolved Förster Resonance Energy Transfer-Based Assay for Antigen Detection—SARS-CoV-2 as a Proof of Concept

Rusanen, J., Kareinen, L., Szivoczka, L., Ugurlu, H., Levanov, L., Jääskeläinen, A., Ahava, M. J., Kurkela, S., Saksela, K., Hedman, K., Vapalahti, O. & Hepojoki, J., 18 May 2021, In: mBio. 12, 3, 11 p., e00902-21.

Evaluation of three rapid lateral flow antigen detection tests for the diagnosis of SARS-CoV-2 infection

Jääskeläinen, A. E., Ahava, M. J., Jokela, P., Szivoczka, L., Pohjala, S., Vapalahti, O., Lappalainen, M., Hepojoki, J. & Kurkela, S., Apr 2021, In: Journal of Clinical Virology. 137, 4 p., 104785.

Experimental Reptarenavirus Infection of *Boa constrictor* and *Python regius*

Hetzel, U., Korzyukov, Y., Keller, S., Szirovicza, L., Pesch, T., Vapalahti, O., Kipar, A. & Hepojoki, J. M., Apr 2021, In: *Journal of Virology*. 95, 7, 18 p., e01968-20.

A 10-Minute "Mix and Read" Antibody Assay for SARS-CoV-2

Rusanen, J., Kareinen, L., Levanov, L., Mero, S. M., Pakkanen, S. H., Kantele, A., Amanat, F., Krammer, F., Hedman, K., Vapalahti, O. & Hepojoki, J., Feb 2021, In: *Viruses (Basel)*. 13, 2, 12 p., 143.

Molecular rationale for antibody-mediated targeting of the hantavirus fusion glycoprotein

Rissanen, I., Stass, R., Krumm, S. A., Seow, J., Hulswit, R. J. G., Paesen, G. C., Hepojoki, J., Vapalahti, O., Lundkvist, Å., Reynard, O., Volchkov, V., Doores, K. J., Huiskonen, J. T. & Bowden, T. A., 22 Dec 2020, In: *eLife*. 9, 23 p., 58242.

2020 taxonomic update for phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales

Kuhn, J. H., Adkins, S., Alioto, D., Alkhovsky, S. V., Amarasinghe, G. K., Anthony, S. J., Avsic-Zupanc, T., Ayllon, M. A., Bahl, J., Balkema-Buschmann, A., Ballinger, M. J., Bartonicka, T., Basler, C., Bavari, S., Beer, M., Bente, D. A., Bergeron, E., Bird, B. H., Blair, C. & Blasdell, K. R. & 209 others, Bradfute, S. B., Breyta, R., Briese, T., Brown, P. A., Buchholz, U. J., Buchmeier, M. J., Bukreyev, A., Burt, F., Buzkan, N., Calisher, C. H., Cao, M., Casas, I., Chamberlain, J., Chandran, K., Charrel, R. N., Chen, B., Chiumentti, M., Choi, I.-R., Clegg, J. C. S., Crozier, I., da Graca, J. V., Dal Bo, E., Davila, A. M. R., de la Torre, J. C., de Lamballerie, X., de Swart, R. L., Di Bello, P. L., Di Paola, N., Di Serio, F., Dietzgen, R. G., Digiaro, M., Dolja, V. V., Dolnik, O., Drebot, M. A., Drexler, J. F., Duerrwald, R., Dufkova, L., Dundon, W. G., Duprex, W. P., Dye, J. M., Easton, A. J., Ebihara, H., Elbeaino, T., Ergunay, K., Fernandes, J., Fooks, A. R., Formenty, P. B. H., Forth, L. F., Fouchier, R. A. M., Freitas-Astua, J., Gago-Zachert, S., Gao, G. F., Garcia, M. L., Garcia-Sastre, A., Garrison, A. R., Gbakima, A., Goldstein, T., Gonzalez, J.-P. J., Griffiths, A., Groschup, M. H., Guenther, S., Guterres, A., Hall, R. A., Hammond, J., Hassan, M., Hepojoki, J., Hepojoki, S., Hetzel, U., Hewson, R., Hoffmann, B., Hongo, S., Hoepfer, D., Horie, M., Hughes, H. R., Hyndman, T. H., Jambai, A., Jardim, R., Jiang, D., Jin, Q., Jonson, G. B., Junglen, S., Karadag, S., Keller, K. E., Klempa, B., Klingstrom, J., Kobinger, G., Kondo, H., Koonin, E. V., Krupovic, M., Kurath, G., Kuzmin, I. V., Laenen, L., Lamb, R. A., Lambert, A. J., Langevin, S. L., Lee, B., Lemos, E. R. S., Leroy, E. M., Li, D., Li, J., Liang, M., Liu, W., Liu, Y., Lukashovich, I. S., Maes, P., Marciel de Souza, W., Marklewitz, M., Marshall, S. H., Martelli, G. P., Martin, R. R., Marzano, S.-Y. L., Massart, S., McCauley, J. W., Mielke-Ehret, N., Minafra, A., Minutolo, M., Mirazimi, A., Muehlbach, H.-P., Muhlberger, E., Naidu, R., Natsuaki, T., Navarro, B., Navarro, J. A., Netesov, S. V., Neumann, G., Nowotny, N., Nunes, M. R. T., Nylund, A., Okland, A. L., Oliveira, R. C., Palacios, G., Pallas, V., Palyi, B., Papa, A., Parrish, C. R., Pauvolid-Correa, A., Paweska, J. T., Payne, S., Perez, D. R., Pfaff, F., Radoshitzky, S. R., Rahman, A.-U., Ramos-Gonzalez, P. L., Resende, R. O., Reyes, C. A., Rima, B. K., Romanowski, V., Robles Luna, G., Rota, P., Rubbenstroth, D., Runstadler, J. A., Ruzek, D., Sabanadzovic, S., Salat, J., Sall, A. A., Salvato, M. S., Sarpkaya, K., Sasaya, T., Schwemmle, M., Shabbir, M. Z., Shi, X., Shi, Z., Shirako, Y., Simmonds, P., Sirmarova, J., Sironi, M., Smither, S., Smura, T., Song, J.-W., Spann, K. M., Spengler, J. R., Stenglein, M. D., Stone, D. M., Strakova, P., Takada, A., Tesh, R. B., Thornburg, N. J., Tomonaga, K., Tordo, N., Towner, J. S., Turina, M., Tzanetakis, I., Ulrich, R. G., Vaira, A. M., van den Hoogen, B., Varsani, A., Vasilakis, N., Verbeek, M., Wahl, V., Walker, P. J., Wang, H., Wang, J., Wang, X., Wang, L.-F., Wei, T., Wells, H., Whitfield, A. E., Williams, J. V., Wolf, Y. I., Wu, Z., Yang, X., Yang, X., Yu, X., Yutin, N., Zerbini, F. M., Zhang, T., Zhang, Y.-Z., Zhou, G. & Zhou, X., Dec 2020, In: *Archives of Virology*. 165, 12, p. 3023–3072 50 p.

Neuropilin-1 facilitates SARS-CoV-2 cell entry and infectivity

Cantuti-Castelvetri, L., Ojha, R., Pedro, L. D., Djannatian, M., Franz, J., Kuivanen, S., van der Meer, F., Kallio, K., Kaya, T., Anastasina, M., Smura, T., Levanov, L., Szirovicza, L., Tobi, A., Kallio-Kokko, H., Österlund, P., Joensuu, M., Meunier, F. A., Butcher, S. J. & Winkler, M. S. & 9 others, Mollenhauer, B., Helenius, A., Gokce, O., Teesalu, T., Hepojoki, J., Vapalahti, O., Stadelmann, C., Balistreri, G. & Simons, M., 13 Nov 2020, In: *Science*. 370, 6518, 40 p.

Serpentoviruses: More than Respiratory Pathogens

Dervas, E., Hepojoki, J., Smura, T., Prähauser, B., Windbichler, K., Blümich, S., Ramis, A., Hetzel, U. & Kipar, A., Sept 2020, In: *Journal of Virology*. 94, 18, 18 p., ARTN e00649-20.

Systems-Level Immunomonitoring from Acute to Recovery Phase of Severe COVID-19

Rodriguez, L., Pekkarinen, P., Lakshmikanth, T., Tan, Z., Rosat Consiglio, C., Pou, C., Chen, Y., Habimana Mugabo, C., Nguyen, N. A., Nowlan, K., Strandin, T., Levanov, L., Mikes, J., Wang, J., Kantele, A., Hepojoki, J., Vapalahti, O., Heinonen, S., Kekäläinen, E. & Brodin, P., 25 Aug 2020, In: *Cell Reports Medicine*. 1, 5, 17 p., 100078.

A serological assay to detect SARS-CoV-2 seroconversion in humans

Amanat, F., Stadlbauer, D., Strohmaier, S., Nguyen, T. H. O., Chromikova, V., McMahon, M., Jiang, K., Arunkumar, G. A., Jurchyszak, D., Polanco, J., Bermudez-Gonzalez, M., Kleiner, G., Aydiillo, T., Miorin, L., Fierer, D. S., Lugo, L. A., Kojic, E. M., Stoeber, J., Liu, S. T. H. & Cunningham-Rundles, C. & 10 others, Felgner, P. L., Moran, T., Garcia-Sastre, A.,

Caplivski, D., Cheng, A. C., Kedzierska, K., Vapalahti, O., Hepojoki, J. M., Simon, V. & Krammer, F., Jul 2020, In: Nature Medicine. 26, 7, p. 1033-+ 12 p.

Identification of Reptarenaviruses, Hartmanviruses, and a Novel Chuvirus in Captive Native Brazilian Boa Constrictors with Boid Inclusion Body Disease

BIBD Grp, Argent, F. F., Hepojoki, J., Smura, T., Szivovics, L., Hammerschmitt, M. E., Driemeier, D., Kipar, A. & Hetzel, U., Jun 2020, In: Journal of Virology. 94, 11, 19 p., e00001-20.

Snake Deltavirus Utilizes Envelope Proteins of Different Viruses To Generate Infectious Particles

Szivovics, L., Hetzel, U., Kipar, A., Martinez-Sobrido, L., Vapalahti, O. & Hepojoki, J., 28 Apr 2020, In: mBio. 11, 2, 19 p., e03250-19.

Differences in Tissue and Species Tropism of Reptarenavirus Species Studied by Vesicular Stomatitis Virus Pseudotypes

Korzyukov, Y., Iheozor-Ejiofor, R., Levanov, L., Smura, T., Hetzel, U., Szivovics, L., de la Torre, J. C., Martinez-Sobrido, L., Kipar, A., Vapalahti, O. & Hepojoki, J., Apr 2020, In: Viruses (Basel). 12, 4, 16 p., 395.

Orthohantavirus Isolated in Reservoir Host Cells Displays Minimal Genetic Changes and Retains Wild-Type Infection Properties

Strandin, T., Smura, T., Ahola, P., Aaltonen, K., Sironen, T., Hepojoki, J., Eckerle, I., Ulrich, R. G., Vapalahti, O., Kipar, A. & Forbes, K. M., Apr 2020, In: Viruses (Basel). 12, 4, 14 p., 457.

Serological and molecular findings during SARS-CoV-2 infection: the first case study in Finland, January to February 2020

Haveri, A., Smura, T., Kuivanen, S., Österlund, P., Hepojoki, J., Ikonen, N., Pitkäpaasi, M., Blomqvist, S., Rönkkö, E., Kantele, A., Strandin, T., Kallio-Kokko, H., Mannonen, L., Lappalainen, M., Broas, M., Jiang, M., Siira, L., Salminen, M., Puimalainen, T. & Sane, J. & 3 others, Melin, M., Vapalahti, O. & Savolainen-Kopra, C., 19 Mar 2020, In: Eurosurveillance. 25, 11, p. 16-21 6 p., 2000266.

LFRET, a novel rapid assay for anti-tissue transglutaminase antibody detection

Rusanen, J., Toivonen, A., Hepojoki, J., Hepojoki, S., Arikoski, P., Heikkinen, M., Vaarala, O., Ilonen, J. & Hedman, K., 29 Nov 2019, In: PLoS One. 14, 11, 12 p., e0225851.

Antibody response in snakes with boid inclusion body disease

Windbichler, K., Michalopoulou, E., Palamides, P., Pesch, T., Jelinek, C., Vapalahti, O., Kipar, A., Hetzel, U. & Hepojoki, J., 9 Sept 2019, In: PLoS One. 14, 9, 28 p., e0221863.

Urine and Free Immunoglobulin Light Chains as Analytes for Serodiagnosis of Hantavirus Infection

Hepojoki, S., Kareinen, L., Strandin, T., Vaheri, A., Holthöfer, H., Mustonen, J., Mäkelä, S., Hedman, K., Vapalahti, O. & Hepojoki, J., Sept 2019, In: Viruses (Basel). 11, 9, 14 p., 809.

ICTV Virus Taxonomy Profile: Arenaviridae

ICTV Report Consortium, Radoshitzky, S. R., Buchmeier, M. J., Charrel, R. N., Hepojoki, J. & de la Torre, J. C., Aug 2019, In: Journal of General Virology. 100, 8, p. 1200-1201 2 p.

Immunoassay for serodiagnosis of Zika virus infection based on time-resolved Förster resonance energy transfer

Kareinen, L., Hepojoki, S., Huhtamo, E., Korhonen, E. M., Schmidt-Chanasit, J., Hedman, K., Hepojoki, J. & Vapalahti, O., 23 Jul 2019, In: PLoS One. 14, 7, p. e0219474 13 p., 0219474.

Detection of novel tick-borne pathogen, Alongshan virus, in Ixodes ricinus ticks, south-eastern Finland, 2019

Kuivanen, S., Levanov, L., Kareinen, L., Sironen, T., Jääskeläinen, A. J., Plyusnin, I., Zakhm, F., Emmerich, P., Schmidt-Chanasit, J., Hepojoki, J., Smura, T. & Vapalahti, O., 4 Jul 2019, In: Eurosurveillance. 24, 27, p. 9-16 8 p., 1900394.

Taxonomy of the order Bunyvirales: update 2019

Abudurexiti, A., Adkins, S., Alioto, D., Alkhovsky, S. V., Avsic-Zupanc, T., Ballinger, M. J., Bente, D. A., Beer, M., Bergeron, E., Blair, C. D., Briese, T., Buchmeier, M. J., Burt, F. J., Calisher, C. H., Chang, C., Charrel, R. N., Choi, I. R., Clegg, J. C. S., de la Torre, J. C. & de Lamballerie, X. & 83 others, Deng, F., Di Serio, F., Digiaro, M., Drebot, M. A., Duan, X., Ebihara, H., Elbeaino, T., Ergunay, K., Fulhorst, C. F., Garrison, A. R., Gao, G. F., Gonzalez, J.-P. J., Groschup, M. H., Guenther, S., Haenni, A.-L., Hall, R. A., Hepojoki, J., Hewson, R., Hu, Z., Hughes, H. R., Jonson, M. G., Junglen, S.,

Klempa, B., Klingstrom, J., Kou, C., Laenen, L., Lambert, A. J., Langevin, S. A., Liu, D., Lukashevich, I. S., Luo, T., Lu, C., Maes, P., de Souza, W. M., Marklewitz, M., Martelli, G. P., Matsuno, K., Mielke-Ehret, N., Minutolo, M., Mirazimi, A., Moming, A., Muehlbach, H.-P., Naidu, R., Navarro, B., Teixeira Nunes, M. R., Palacios, G., Papa, A., Pauvolid-Correa, A., Paweska, J. T., Qiao, J., Radoshitzky, S. R., Resende, R. O., Romanowski, V., Sall, A. A., Salvato, M. S., Sasaya, T., Shen, S., Shi, X., Shirako, Y., Simmonds, P., Sironi, M., Song, J.-W., Spengler, J. R., Stenglein, M. D., Su, Z., Sun, S., Tang, S., Turina, M., Wang, B., Wang, C., Wang, H., Wang, J., Wei, T., Whitfield, A. E., Zerbini, F. M., Zhang, J., Zhang, L., Zhang, Y., Zhang, Y.-Z., Zhang, Y., Zhou, X., Zhu, L. & Kuhn, J. H., Jul 2019, In: Archives of Virology. 164, 7, p. 1949-1965 17 p.

Identification of a Novel Deltavirus in Boa Constrictors

Hetzel, U., Szirovicza, L., Smura, T., Prahauer, B., Vapalahti, O., Kipar, A. & Hepojoki, J., 2019, In: mBio. 10, 2, 8 p., ARTN e00014-19.

Characterization of Haartman Institute snake virus-1 (HISV-1) and HISV-like viruses-The representatives of genus Hartmanivirus, family Arenaviridae

Hepojoki, J., Hepojoki, S., Smura, T., Szirovicza, L., Dervas, E., Prahauer, B., Nufer, L., Schraner, E. M., Vapalahti, O., Kipar, A. & Hetzel, U., Nov 2018, In: PLoS Pathogens. 14, 11, 29 p., 1007415.

Galectin-3-binding protein: A multitask glycoprotein with innate immunity functions in viral and bacterial infections

Loimaranta, V., Hepojoki, J., Laaksoaho, O. & Pulliainen, A. T., Oct 2018, In: Journal of Leukocyte Biology. 104, 4, p. 777-786 10 p.

Taxonomy of the family Arenaviridae and the order Bunyvirales: update 2018

Maes, P., Alkhovsky, S. V., Bao, Y., Beer, M., Birkhead, M., Briese, T., Buchmeier, M. J., Calisher, C. H., Charrel, R. N., Choi, I. R., Clegg, C. S., de la Torre, J. C., Delwart, E., DeRisi, J. L., Di Bello, P. L., Di Serio, F., Digiaro, M., Dolja, V. V., Drosten, C. & Druciarek, T. Z. & 79 others, Du, J., Ebihara, H., Elbeaino, T., Gergerich, R. C., Gillis, A. N., Gonzalez, J.-P. J., Haenni, A.-L., Hepojoki, J., Hetzel, U., Thien Ho, Ni Hong, Jain, R. K., van Vuren, P. J., Jin, Q., Jonson, M. G., Junglen, S., Keller, K. E., Kemp, A., Kipar, A., Kondov, N. O., Koonin, E. V., Kormelink, R., Korzyukov, Y., Krupovic, M., Lambert, A. J., Laney, A. G., LeBreton, M., Lukashevich, I. S., Marklewitz, M., Markotter, W., Martelli, G. P., Martin, R. R., Mielke-Ehret, N., Muehlbach, H.-P., Navarro, B., Ng, T. F. F., Teixeira Nunes, M. R., Palacios, G., Paweska, J. T., Peters, C. J., Plyusnin, A., Radoshitzky, S. R., Romanowski, V., Salmenperä, P., Salvato, M. S., Sanfacon, H., Sasaya, T., Schmaljohn, C., Schneider, B. S., Shirako, Y., Siddell, S., Sironen, T. A., Stenglein, M. D., Storm, N., Sudini, H., Tesh, R. B., Tzanetakis, I. E., Uppala, M., Vapalahti, O., Vasilakis, N., Walker, P. J., Wang, G., Wang, L., Wang, Y., Wei, T., Wiley, M. R., Wolf, Y. I., Wolfe, N. D., Wu, Z., Xu, W., Yang, L., Yang, Z., Yeh, S.-D., Zhang, Y.-Z., Zheng, Y., Zhou, X., Zhu, C., Zirkel, F. & Kuhn, J. H., Aug 2018, In: Archives of Virology. 163, 8, p. 2295-2310 16 p.

Nidovirus-Associated Proliferative Pneumonia in the Green Tree Python (*Morelia viridis*)

Dervas, E., Hepojoki, J., Laimbacher, A., Romero-Palomo, F., Jelinek, C., Keller, S., Smura, T., Hepojoki, S., Kipar, A. & Hetzel, U., Nov 2017, In: Journal of Virology. 91, 21, 21 p., UNSP e00718-17.

Structural Transitions of the Conserved and Metastable Hantaviral Glycoprotein Envelope

Rissanen, I., Stass, R., Zeltina, A., Li, S., Hepojoki, J., Harlos, K., Gilbert, R. J. C., Huisken, J. T. & Bowden, T. A., Nov 2017, In: Journal of Virology. 91, 21, 11 p., UNSP e00378-17.

Co-infecting Reptarenaviruses Can Be Vertically Transmitted in Boa Constrictor

Keller, S., Hetzel, U., Sironen, T., Korzyukov, Y., Vapalahti, O., Kipar, A. & Hepojoki, J., Jan 2017, In: PLoS Pathogens. 13, 1, 21 p., 1006179.

Large-Scale Screening of Preferred Interactions of Human Src Homology-3 (SH3) Domains Using Native Target Proteins as Affinity Ligands

Kazlauskas, A., Schmotz, C., Kesti, T., Hepojoki, J., Kleino, I., Kaneko, T., Li, S. S. C. & Saksela, K., Oct 2016, In: Molecular & Cellular Proteomics. 15, 10, p. 3270-3281 12 p.

Mapping of human B-cell epitopes of Sindbis virus

Adouchief, S., Smura, T., Vapalahti, O. & Hepojoki, J., Sept 2016, In: Journal of General Virology. 97, 9, p. 2243-2254 12 p.

Generation of Anti-Boa Immunoglobulin Antibodies for Serodiagnostic Applications, and Their Use to Detect Anti-Reptarenavirus Antibodies in Boa Constrictor

Korzyukov, Y., Hetzel, U., Kipar, A., Vapalahti, O. & Hepojoki, J., 29 Jun 2016, In: PLoS One. 11, 6, 15 p., 0158417.

Interferons Induce STAT1-Dependent Expression of Tissue Plasminogen Activator, a Pathogenicity Factor in Puumala Hantavirus Disease

Strandin, T., Hepojoki, J., Laine, O., Makela, S., Klingstrom, J., Lundkvist, A., Julkunen, I., Mustonen, J. & Vaheri, A., 15 May 2016, In: Journal of Infectious Diseases. 213, 10, p. 1632-1641 10 p.

A Molecular-Level Account of the Antigenic Hantaviral Surface

Li, S., Rissanen, I., Zeltina, A., Hepojoki, J., Raghwani, J., Harlos, K., Pybus, O. G., Huiskonen, J. T. & Bowden, T. A., 3 May 2016, In: Cell Reports. 15, 5, p. 959-967 9 p.

Vaccinia virus-free rescue of fluorescent replication-defective vesicular stomatitis virus and pseudotyping with Puumala virus glycoproteins for use in neutralization tests

Iheozor-Ejiofor, R. P., Levanov, L., Hepojoki, J., Strandin, T., Lundkvist, A., Plyusnin, A. & Vapalahti, O., May 2016, In: Journal of General Virology. 97, p. 1052-1059 8 p.

Arenavirus Coinfections Are Common in Snakes with Boid Inclusion Body Disease

Hepojoki, J., Salmenpera, P., Sironen, T., Hetzel, U., Korzyukov, Y., Kipar, A. & Vapalahti, O., Aug 2015, In: Journal of Virology. 89, 16, p. 8657-8660 4 p.

Competitive Homogeneous Immunoassay for Rapid Serodiagnosis of Hantavirus Disease

Hepojoki, S., Rusanen, J., Hepojoki, J., Nurmi, V., Vaheri, A., Lundkvist, A., Hedman, K. & Vapalahti, O., Jul 2015, In: Journal of Clinical Microbiology. 53, 7, p. 2292-2297 6 p.

Serological survey of Seewis virus antibodies in patients suspected for hantavirus infection in Finland; a cross-reaction between Puumala virus antiserum with Seewis virus N protein?

Ling, J., Vaheri, A., Hepojoki, S., Levanov, L., Jaaskelainen, A., Henttonen, H., Vapalahti, O., Sironen, T. & Hepojoki, J., Jul 2015, In: Journal of General Virology. 96, p. 1664-1675 12 p.

Preferred SH3 Domain Partners of ADAM Metalloproteases Include Shared and ADAM-Specific SH3 Interactions

Kleino, I., Jarviluoma, A., Hepojoki, J., Huovila, A. P. & Saksela, K., 31 Mar 2015, In: PLoS One. 10, 3, 19 p., 0121301.

Rapid Homogeneous Immunoassay Based on Time-Resolved Forster Resonance Energy Transfer for Serodiagnosis of Acute Hantavirus Infection

Hepojoki, S., Hepojoki, J., Hedman, K., Vapalahti, O. & Vaheri, A., Feb 2015, In: Journal of Clinical Microbiology. 53, 2, p. 636-640 5 p.

Replication of Boid Inclusion Body Disease-Associated Arenaviruses Is Temperature Sensitive in both Boid and Mammalian Cells

Hepojoki, J., Kipar, A., Korzyukov, Y., Bell-Sakyi, L., Vapalahti, O. & Hetzel, U., Jan 2015, In: Journal of Virology. 89, 2, p. 1119-1128 10 p.

The fundamental role of endothelial cells in hantavirus pathogenesis

Hepojoki, J., Vaheri, A. & Strandin, T., 22 Dec 2014, In: Frontiers in Microbiology. 5, 7 p., 727.

Acute hantavirus infection induces galectin-3-binding protein

Hepojoki, J., Strandin, T., Hetzel, U., Sironen, T., Klingstrom, J., Sane, J., Mäkelä, S., Mustonen, J., Meri, S., Lundkvist, Å., Vapalahti, O., Lankinen, H. & Vaheri, A., Nov 2014, In: Journal of General Virology. 95, 11, p. 2356-2364 9 p.

A Protein L -Based Immunodiagnostic Approach Utilizing Time-Resolved Forster Resonance Energy Transfer

Hepojoki, S., Nurmi, V., Vaheri, A., Hedman, K., Vapalahti, O. & Hepojoki, J., 2 Sept 2014, In: PLoS One. 9, 9, 8 p., 106432.

Identification of linear human B-cell epitopes of tick-borne encephalitis virus

Kuivanen, S., Hepojoki, J., Vene, S., Vaeheri, A. & Vapalahti, O., 19 Jun 2014, In: *Virology Journal*. 11, 9 p., 115.

Reply to "Updated Phylogenetic Analysis of Arenaviruses Detected in Boid Snakes"

Hetzel, U., Sironen, T., Laurinmaki, P., Liljeroos, L., Patjas, A., Henttonen, H., Vaeheri, A., Artelt, A., Kipar, A., Butcher, S. J., Vapalahti, O. & Hepojoki, J., Jan 2014, In: *Journal of Virology*. 88, 2, p. 1401-1401 1 p.

Analysis of Potato virus Y Coat Protein Epitopes Recognized by Three Commercial Monoclonal Antibodies

Tian, Y.-P., Hepojoki, J., Ranki, H., Lankinen, H. & Valkonen, J. P. T., 2014, In: *PLoS One*. 9, 12, 20 p., 0115766.

Isolation, Identification, and Characterization of Novel Arenaviruses, the Etiological Agents of Boid Inclusion Body Disease

Hetzel, U., Sironen, T., Laurinmäki, P., Liljeroos, L., Patjas, A., Henttonen, H., Vaeheri, A., Artelt, A., Kipar, A., Butcher, S. J., Vapalahti, O. & Hepojoki, J., Oct 2013, In: *Journal of Virology*. 87, 20, p. 10918-10935 18 p.

Uncovering the mysteries of hantavirus infections

Vaeheri, A., Strandin, T., Hepojoki, J., Sironen, T., Henttonen, H., Makela, S. & Mustonen, J., Aug 2013, In: *Nature Reviews, Microbiology*. 11, 8, p. 539-550 12 p.

Time-Resolved FRET -Based Approach for Antibody Detection - A New Serodiagnostic Concept

Saraheimo, S., Hepojoki, J., Nurmi, V., Lahtinen, A., Hemmila, I., Vaeheri, A., Vapalahti, O. & Hedman, K., 7 May 2013, In: *PLoS One*. 8, 5, p. Article Number: e62739 11 p.

Cytoplasmic tails of bunyavirus Gn glycoproteins-Could they act as matrix protein surrogates?

Strandin, T., Hepojoki, J. & Vaeheri, A., 15 Mar 2013, In: *Virology*. 437, 2, p. 73-80 8 p.

Hantavirus structure - molecular interactions behind the scene

Hepojoki, J., Strandin, T., Lankinen, H. & Vaeheri, A., 2012, In: *Journal of General Virology*. 93, p. 1631-1644 14 p.

Glycoprotein Interactions in the Assembly of Hantaviruses

Hepojoki, J., 27 Nov 2011, Helsinki: Helsingin yliopisto. 86 p.

Inactivation of hantaviruses by N-ethylmaleimide preserves virion integrity

Strandin, T., Hepojoki, J., Wang, H., Vaeheri, A. & Lankinen, H., 2011, In: *Journal of General Virology*. 92, 5, p. 1189-1198 10 p.

The cytoplasmic tail of hantavirus Gn glycoprotein interacts with RNA

Strandin, T., Hepojoki, J., Wang, H., Vaeheri, A. & Lankinen, H., 2011, In: *Virology*. 418, 1, p. 12-20 9 p.

Cytoplasmic tails of hantavirus glycoproteins interact with the nucleocapsid protein

Hepojoki, J., Strandin, T., Wang, H., Vapalahti, O., Vaeheri, A. & Lankinen, H., 2010, In: *Journal of General Virology*. 91, 9, p. 2341-2350 10 p.

Electron Cryotomography of Tula Hantavirus Suggests a Unique Assembly Paradigm for Enveloped Viruses

Huiskonen, J. T., Hepojoki, J., Laurinmaki, P., Vaeheri, A., Lankinen, H., Butcher, S. J. & Gruenewald, K., 2010, In: *Journal of Virology*. 84, 10, p. 4889-4897 9 p.

Interactions and Oligomerization of Hantavirus Glycoproteins

Hepojoki, J., Strandin, T., Vaeheri, A. & Lankinen, H., 2010, In: *Journal of Virology*. 84, p. 227-242 16 p.

Degradation and aggresome formation of the Gn tail of the apathogenic Tula hantavirus

Wang, H., Strandin, T., Hepojoki, J., Lankinen, H. & Vaeheri, A., 2009, In: *Journal of General Virology*. 90, 12, p. 2995-3001 7 p.

Hantaviruses and TNF-alpha act synergistically to induce ERK1/2 inactivation in Vero E6 cells

Strandin, T., Hepojoki, J., Wang, H., Vaheri, A. & Lankinen, H., 2008, In: Virology Journal. 5, 110, 9 s

Improvement of binding of Puumala virus neutralization site resembling peptide with a second-generation phage library

Heiskanen, T., Li, X.-D., Hepojoki, J., Gustafsson, E., Lundkvist, Å., Vaheri, A. & Lankinen, H., Jun 2003, In: Protein Engineering. 16, 6, p. 443-450 8 p.

Activities

8th European Meeting on Viral Zoonoses, St. Raphael, France

Hepojoki, J. (Speaker)

22 Oct 2017 → 25 Oct 2017

Annual Finnish Virology Days, 2017, Jyväskylä, Finland

Hepojoki, J. (Speaker)

14 Mar 2017 → 15 Mar 2017

Virus-cell interactions 2015, Seili, Finland

Hepojoki, J. (Speaker)

17 Aug 2015 → 19 Aug 2015

Vetsuisse Faculty, University of Zürich

Hepojoki, J. (Visiting researcher)

9 Nov 2014 → 5 Dec 2014

Virus-cell interactions 2014, Seili, Finland

Hepojoki, J. (Speaker)

18 Aug 2014 → 20 Aug 2014

Saskia Keller

Hepojoki, J. (Host)

23 Jun 2014 → 13 Aug 2014

7th European Meeting on Viral Zoonoses, St:Raphael, France

Hepojoki, J. (Speaker)

24 May 2014 → 27 May 2014

University of Oxford

Hepojoki, J. (Visiting researcher)

9 Feb 2014 → 10 Feb 2014

Annual Finnish Virology Days, 2014, Helsinki, Finland

Hepojoki, J. (Speaker: Presenter)

2014

IX International conference on HFRS, HPS & hantaviruses, 2013, Beijing, China

Hepojoki, J. (Speaker: Presenter)

2013

6th European Meeting on Viral Zoonoses, 2011, St. Raphaël, France

Hepojoki, J. (Speaker: Presenter)

2011

Annual Finnish Virology Days, 2011, Jyväskylä, Finland

Hepojoki, J. (Speaker: Presenter)
2011

The 10th Finnish Peptide Symposium, 2011, Tahkavuori, Finland

Hepojoki, J. (Speaker: Presenter)
2011

Annual Finnish Virology Days, 2010, Turku, Finland

Hepojoki, J. (Speaker: Presenter)
2010

5th European Meeting on Viral Zoonoses, 2009, St. Raphaël, France

Hepojoki, J. (Speaker: Presenter)
2009

Max Planck Institute of Biochemistry

Hepojoki, J. (Visiting researcher)
2009

Annual Finnish Virology Days / ESCV, Clinical Virology Annual Meeting, 2008, Saariselkä, Finland

Hepojoki, J. (Speaker: Presenter)
2008

Annual Finnish Virology Days, 2006, Tampere, Finland

Hepojoki, J. (Speaker: Presenter)
2006

GBF (Gesellschaft für Biotechnologische Forschung)

Hepojoki, J. (Visiting researcher)
10 Jul 2005 → 22 Jul 2005

Nordic Viral Zoonoses Meeting, 2005, Öland, Sweden

Hepojoki, J. (Speaker: Presenter)
2005

Projects

BIGMAC: Bioinspired inorganic nanoparticles-based mRNA antiviral vaccines

Hepojoki, J. (Project manager), Ojha, R. K. (Participant) & Timin, E. A. (Participant)
Suomen Akatemia Projektilaskutus
01/09/2023 → 31/08/2027

Erkon säätiö Hepojoki 2022-2027

Hepojoki, J. (Project manager), Sander, W. J. (Participant), Szirovicza, L. (Participant) & Timin, E. A. (Participant)
Jane ja Aatos Erkon säätiö
01/09/2022 → 31/08/2027

Juselius, Hepojoki 2022-2026

Hepojoki, J. (Project manager), Ekström, E. J. (Participant), Sander, W. J. (Participant) & Szirovicza, L. (Participant)
Sigrid Juséliuksen Säätiö @003701165704@
01/09/2022 → 31/08/2026