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Meritförteckning

Positions of trust at external institutions

Board Member, Biocenter Finland

Member of Advisory Committee, worldwide Protein Data Bank (wwPDB)

Member of the Scientific Advisory Committee, Molecular and Cellular Structure cluster, EMBL-EBI

Positions of trust at the University of Helsinki

Viikki Campus Cooperation Committee, deputy member

Member of Life Science Cooperation Group LifeCo

Member of HiLIFE management team

HiLIFE representative in the "Research Theme Implementation Roadmap" workgroup

Member of Thriving Nature (PROFI5) steering group

Member of UHBRAIN (PROFI6) steering group

HiLIFE representative in PROF17 proposal planning

Kvalifikationer

Title of Associate Professor, University of Oxford

Tilldelningsdatum: 26 mars 2015

Title of Docent in Molecular Virology, Helsingfors universitet

Tilldelningsdatum: 13 maj 2014

Title of University Research Lecturer, University of Oxford

Tilldelningsdatum: 1 jan. 2014

Genetics, Doctor of Philosophy (PhD), University of Helsinki

Tilldelningsdatum: 25 jan. 2006

Genetics, Master of Science (MSc), University of Helsinki

Tilldelningsdatum: 23 feb. 2001

Anställning

direktör

Institutet för bioteknik

Helsingfors universitet

Helsinki, Finland
1 sep. 2020 → present

professor

Forskningsprogrammet för molekylära och integrativa biovetenskaper
Helsingfors universitet
Finland
1 juni 2021 → present

Honorary Visiting Research Fellow

University of Oxford
Storbritannien
1 apr. 2020 → present

Tutkimusryhmän johtaja

University of Oxford
Oxford, Storbritannien
1 jan. 2015 → 31 mars 2020

Akatemiatutkija

University of Oxford
Oxford, Storbritannien
1 jan. 2010 → 31 dec. 2014

Forskningsoutput

Snapshots of actin and tubulin folding inside the TRiC chaperonin

Kelly, J. J., Tranter, D., Pardon, E., Chi, G., Kramer, H., Happonen, L., Knee, K. M., Janz, J. M., Steyaert, J., Bulawa, C., Paavilainen, V. O., Huiskonen, J. T. & Yue, W. W., 21 apr. 2022, (!E-pub ahead of print) I: Nature Structural and Molecular Biology. 27 s.

Structure of a Cell Entry Defective Human Adenovirus Provides Insights into Precursor Proteins and Capsid Maturation: Cryo-EM structure of ts1 virion of an adenovirus

Yu, X., Mullen, T. M., Abrishami, V., Huiskonen, J. T., Nemerow, G. R. & Reddy, V. S., 30 jan. 2022, I: Journal of Molecular Biology. 434, 2, 13 s., 167350.

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Abrishami, V., Ilca, S. L., Gómez-Blanco, J., Rissanen, I., de la Rosa-Trevín, J. M., Reddy, V. S., Carazo, J. M. & Huiskonen, J. T., mars 2021, I: Progress in Biophysics & Molecular Biology. 160, s. 43-52 10 s.

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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, I: eLife. 9, 23 s., 58242.

The Hantavirus Surface Glycoprotein Lattice and Its Fusion Control Mechanism

Serris, A., Stass, R., Bignon, E. A., Muena, N. A., Manuguerra, J.-C., Jangra, R. K., Li, S., Chandran, K., Tischler, N. D., Huiskonen, J. T., Rey, F. A. & Guardado-Calvo, P., 15 okt. 2020, I: *Cell*. 183, 2, s. 442-456e16 31 s.

Assessment of Immunogenicity and Efficacy of a Zika Vaccine Using Modified Vaccinia Ankara Virus as Carriers.

López-Camacho, C., Kim, Y. C., Abbink, P., Larocca, R. A., Huiskonen, J. T., Barouch, D. H. & Reyes-Sandoval, A., 2 nov. 2019, I: *Pathogens*. 8, 4, 11 s., E216.

The structural basis of lipid scrambling and inactivation in the endoplasmic reticulum scramblase TMEM16K

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Structures of enveloped virions determined by cryogenic electron microscopy and tomography: Advances in Virus Research

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Ilca, S., Sun, X., El Omari, K., Kotecha, A., Haas, F. D., DiMaio, F., Grimes, J. M., Stuart, D. I., Poranen, M. M. & Huiskonen, J. T., 13 juni 2019, I: *Nature*. 570, s. 252-+

Assessment of Immunogenicity and Neutralisation Efficacy of Viral-Vectored Vaccines Against Chikungunya Virus

Lopez-Camacho, C., Kim, Y. C., Blight, J., Moreli, M. L., Montoya-Diaz, E., Huiskonen, J. T., Kuehmerer, B. M. & Reyes-Sandoval, A., apr. 2019, I: *Viruses (Basel)*. 11, 4, 17 s., 322.

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A Protective Monoclonal Antibody Targets a Site of Vulnerability on the Surface of Rift Valley Fever Virus

Allen, E. R., Krumm, S. A., Raghvani, J., Halldorsson, S., Elliott, A., Graham, V. A., Koudriakova, E., Harlos, K., Wright, D., Warimwe, G. M., Brennan, B., Huiskonen, J. T., Dowall, S. D., Elliott, R. M., Pybus, O. G., Burton, D. R., Hewson, R., Doores, K. J. & Bowden, T. A., 26 dec. 2018, I: *Cell Reports*. 25, 13, s. 3750-+ 13 s.

Characterization of a potent and highly unusual minimally enhancing antibody directed against dengue virus

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Duyvesteyn, H. M. E., Ginn, H. M., Pietila, M. K., Wagner, A., Hattne, J., Grimes, J. M., Hirvonen, E., Evans, G., Parsy, M-L., Sauter, N. K., Brewster, A. S., Huiskonen, J. T., Stuart, D. I., Sutton, G. & Bamford, D. H., 28 feb. 2018, I: *Scientific Reports*. 8, 7 s., 3771.

Shielding and activation of a viral membrane fusion protein

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Building bridges between cellular and molecular structural biology

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Near-atomic structure of Japanese encephalitis virus reveals critical determinants of virulence and stability

Wang, X., Li, S-H., Zhu, L., Nian, Q-G., Yuan, S., Gao, Q., Hu, Z., Ye, Q., Li, X-F., Xie, D-Y., Shaw, N., Wang, J., Walter, T. S., Huiskonen, J. T., Fry, E. E., Qin, C-F., Stuart, D. I. & Rao, Z., 26 apr. 2017, I: *Nature Communications*. 8, 9 s., 14.

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Editorial overview: Virus structure and assembly: Virions - from structure and physics to design principles

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Low pH and Anionic Lipid-dependent Fusion of Uukuniemi Phlebovirus to Liposomes

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Structure of the bacteriophage phi6 nucleocapsid solved to 3.9 angstrom resolution using electron cryomicroscopy

Sun, Z., Sun, X., Ilca, S., De Colibus, L., Stuart, D. I., Poranen, M. M. & Huiskonen, J. T., juli 2015, I: The FEBS Journal. 282, S1, s. 51-52 2 s.

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The PM2 virion has a novel organization with an internal membrane and pentameric receptor binding spikes

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Probing the ability of the coat and vertex protein of the membrane-containing bacteriophage PRD1 to display a meningococcal epitope

Huiskonen, J. T., Laakkonen, L., Toropainen, M., Sarvas, M., Bamford, D. H. & Bamford, J. K. H., 2003, I: Virology. 310, 2, s. 267-279 13 s.

Minor proteins, mobile arms and membrane-capsid interactions in the bacteriophage PRD1 capsid

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Aktiviteter

Towards structures of endogenous complexes by cryo-EM

Juha Huiskonen (!!Keynote speaker)
17 okt. 2021

Towards Cryo-EM Structures of Endogenous Complexes

Juha Huiskonen (!!Speaker)
22 jan. 2020

Advances of Cryo-EM in Understanding Macromolecular Structure and Function

Juha Huiskonen (!!Speaker)
29 nov. 2019

Exploring the glycoprotein surface of bunyaviruses

Juha Huiskonen (!!Keynote speaker)
1 okt. 2019

HiLIFE Symposium: Exploring Cellular Complexity by Cryo-EM

Juha Huiskonen (Ordförande)
28 feb. 2019

Activation of a viral membrane fusion protein

Juha Huiskonen (!!Invited speaker)
11 dec. 2018

Viral dsRNA genome organisation revealed by cryoEM

Juha Huiskonen (!!Invited speaker)
11 dec. 2018

Shielding and Activation of a Viral Membrane Fusion Protein

Juha Huiskonen (!!Invited speaker)
25 juni 2018

EMBO Workshop Membrane Fusion in Health and Disease

Juha Huiskonen (Medlem av vetenskaplig kommitté)
24 juni 2018

Shielding and activation of viral membrane fusion proteins

Juha Huiskonen (!!Invited speaker)

27 feb. 2018

Shielding and Activation of a Viral Membrane Fusion Protein

Juha Huiskonen (!!Invited speaker)

19 feb. 2018

Insight into viral class II membrane fusion activation by a combined structural biology approach

Juha Huiskonen (!!Invited speaker)

20 nov. 2017

Insight into Rift Valley fever virus membrane fusion activation by a combined structural biology approach

Juha Huiskonen (!!Invited speaker)

8 sep. 2017

Cryo-EM Structure of the TRP channel PC2 involved in Polycystic Kidney Disease

Juha Huiskonen (!!Keynote speaker)

7 juni 2017

Current opinion in virology (Tidskrift)

Juha Huiskonen (Redaktör) & Adam Zlotnick (Redaktör)

juni 2016

Projekt

EndoGAP: Architecture of Endogenous Gap Junctions

Huiskonen, J.

01/05/2019 → 30/04/2022

A plasmid goes viral: Understanding the origin and evolution of viruses by studying a newly discovered virus-like element.

Erdmann, S., Tischler, N. D., Eichler, J., Huiskonen, J. & Roine, E.

01/08/2020 → 31/07/2023

BIZEB: Bio-Imaging of Zoonotic and Emerging Bunyaviruses

Huiskonen, J.

European Commission / Horizon 2020

01/04/2015 → 31/03/2020

Center of Excellence in Virus Research (CoE_VIRRES)

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25/02/2011 → 31/12/2016

Inhibitors of SARS-Coronavirus-2 infection

Vapalahti, O., Huiskonen, J., Paavilainen, V., Saavalainen, P., Saviranta, P. & Kallioniemi, O.

Academy of Finland

01/07/2020 → 31/12/2022

CellCargo: Molecular mechanisms in cellular cargo trafficking complexes

Huiskonen, J. & Song, X.

01/09/2021 → 31/08/2024

SEMMA: Structures of Endogenous Macromolecular Complexes

Huiskonen, J.

01/09/2018 → 31/08/2022