# Curriculum vitae

## Personal data


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|---|---|
| Full name: | Jussi Matias Hepojoki |
| Birth date and place: | 29.10.1977, Espoo, Finland |
| Citizenship: | Finnish |
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## Education and special skills

### Degrees and titles

*Title of Docent (virology)*

University of Helsinki, Faculty of Medicine, Virology, 23rd of March 2016. Formal requirements http://www.med.helsinki.fi/english/administration/docent.html.

*PhD (virology)*

University of Helsinki, Faculty of Medicine, Virology, 14th of February 2012 (contact details for verification med-studentaffairs@helsinki.fi).

*MSc (biochemistry)*

University of Helsinki, Faculty of Biological and Environmental sciences, Department of Biochemistry, 30th of June 2008.

*B.Eng. (biotechnology and industrial bioprocesses)*

Espoo-Vantaa Institute of Technology, May 2000.

### Special skills

Employment as core facility peptide chemist including: synthesis of soluble peptides and peptide arrays, peptide/protein labelling, purification of peptides and proteins (2000-2011). Involvement in two Finnish Funding Agency for Technology and Innovation funded projects: development of photo-guided peptide synthesis with nano-sized LEDs (2010-2011), development of novel TR-FRET based serodiagnostic approaches (2012-2017).

## Academic employment history

### Current position (since 01.09.2017) at University of Helsinki (UH), Medicum, Department of Virology

Academy of Finland research fellow, 5 year position, competitive funding obtained with project proposal under the title" Immune evasion: The tool for persistent infection and cross-species infectivity of arenaviruses?". For the proposed project I am currently the sole supervisor of 1 PhD student and co-supervisor of another PhD student (see below).

### Current position (since 01.08.2016) at University of Zürich (UZH)

Oberassistent (comparable to Senior Lecturer in the international system) at the Institute of Veterinary Pathology, Vetsuisse Faculty, University of Zurich. I am now pursuing my Habilitation on the virology, persistence and pathogenesis of reptarenavirus in boid snakes.

I am currently (since 01.09.2017) employed on a 10% basis.

### Previous employment and education (UZH=University of Zürich, UH=University of Helsinki)

| Title | Started | Ended |
|---|---|---|
| Project researcher (Tekes TUTL-project, PI:Klaus Hedman) | 01.08.2016 | 31.08.2017 |
| Wissenschaftlicher Mitarbeiter, UZH | 01.03.2016 | 31.07.2016 |
| On research grant, UH | 01.01.2016 | 29.02.2016 |
| Postdoctoral researcher, UH | 01.01.2014 | 31.12.2015 |
| Postdoctoral researcher, UH (Antti Vaheri) | 01.09.2012 | 31.12.2013 |
| On research grant, UH | 01.04.2011 | 31.08.2012 |

| | | |
|---|---|---|
| Graduate student, UH | 01.01.2008 | 31.03.2011 |
| Under different job descriptions, UH | 01.11.2000 | 31.12.2007 |
| BSc thesis, Technical Research Centre of Finland | 11.01.1999 | 30.06.1999 |

*UH: pre-doctoral employment (2000-2012) mainly at Haartman Institute, Peptide and protein laboratory, Department of Virology (except 1.9.2002 – 31.7.2003 and 1.9.2004 – 31.4.2005 when employed by UH, Faculty of Biological and Environmental sciences, Department of Biochemistry).*

*The postdoctoral researcher position funded by UH (2014-2015) was based on my previous track record ("The aim of the postdoctoral researcher pool is to encourage talented, recently graduated doctoral degree holders to seek further qualifications and become independent professional researchers."), 12 positions were granted among 249 applicants off all scientific disciplines.*

## Teaching activities and paedagogical training

**Chairman/Organiser** of weekly Viral Zoonosis Group Meeting (spring 2013-autumn 2015) for PhD and under graduate students (~15-20) at Medical faculty, University of Helsinki.

**Pedagogic studies**, University pedagogy III (Supervision in university, 5 credits, University of Helsinki); basic of teaching in small study groups (1.5 credits, University of Helsinki). These courses fulfil the pedagogic training required for a docentship in Finland.

**Teaching** undergraduate and graduate students in peptide chemistry (5 courses, 2 hours/course, during 2005-2010).

**Supervision and teaching** of special laboratory (peptide chemistry, peptide arrays, protein and peptide purification) techniques to students and researchers at various levels.

## Supervision of graduate and postgraduate students

**Current research students under (co-)supervision**

*University of Zürich, Vetsuisse Faculty, Institute of Veterinary Pathology, Dr.med.vet. students*

Eva Dervas (since 01/2015), project entitled "Pathogenesis of nidovirus infection in green tree python"

Katharina Windbichler (since 01/2017), project entitled "Adaptive immune response in BIBD"

*University of Helsinki, Department of Virology, PhD students*

Leonóra Szirovicza (since 09/2017), MSc, project entitled "Co-infection with segmented viruses and impact to innate immunity, reptarenaviruses as a model"

Yegor Korzyukov (since 08/2014), MSc, project entitled "Reptarenaviruses and Boid Inclusion Body Disease"

Samuel Adouchief (since 08/2016), MD student, project entitled "Sindbis virus infection in development of arthritis"

Juuso Rusanen (since 12/2016), MD student, project entitled "TR-FRET in serodiagnosis of infectious diseases"

**Past research students under (co-)supervision**

*University of Helsinki, Medicum, Department of Virology, MSc*

Yegor Korzyukov, BSc, project entitled "Molecular detection and characterization of arenaviruses in snakes", 2014

*University of Zürich, Vetsuisse Faculty, Institute of Veterinary Pathology, Dr.med.vet. students*

Saskia Keller, project entitled "Vertical transmission of BIBD in boid snakes", 2016

**PhD thesis mentoring**

University of Helsinki, Medicum, Department of Virology

Jiaxin Ling, MD, "Shrew-borne hantaviruses"

Rommel Iheozor-Ejiofor, MSc, "VSV pseudotyping in serodiagnostic and receptor studies"

## Approved research projects / Competitive research funding

| Funding body, year | Project title | Amount / project length |
|---|---|---|
| Academy of Finland | Academy of Finland research fellow, project title" Immune evasion: The tool for persistent infection and cross-species infectivity of arenaviruses?" | 434,485 € / 5 years |
| Academy of Finland | Research expenses for the above mentioned project | 275,023 € / 3 years |
| University of Helsinki, 2014 | Based on previous track record | full salary / 2 years |
| Kliinisen kemian tutkimussäätiö, 2015 | The role of Galecting-3 Binding protein in acute virus infection – hantavirus infection as a model | 5,000 € / 1 year |
| Kliinisen kemian tutkimussäätiö, 2014 | The role of Galecting-3 Binding protein in acute virus infection – hantavirus infection as a model | 5,000 € / 1 year |
| Jenny and Antti Wihuri Foundation, 2013 | Novel arenaviruses in boid snakes – Crossing the species barrier? | 26,000 € / 1 year |
| Magnus Ehrnrooth Foundation, 2011 | Targeted labelling of hantavirus particles for cryoelectron tomography | 9,250 € / 6 months |
| Instumentarium Science Foundation | Specific labelling of hantavirus particles utilizing glycoprotein-targeting peptides | 20,000 € / 1 year |

## Memberships and other academic merits

**Memberships in boards**

Editorial board member in World Journal of Virology (2011-2015)

**Memberships in scientific societies**

Postdoc member of American Society for Microbiology (2010, 2013-2015)

**Other academic merits and scientific peer-reviewing activities**

*Co-author* in a taxonomic proposal (to the International Committee on Taxonomy Viruses) suggesting the establishment of a new genus and new species in the family *Arenaviridae*

*Ad hoc reviewer for grant applications:* Michael J. Fox Foundation (2013)

*Ad hoc reviewer for research articles:* PLOS Pathogens, Frontiers in Immunology, Scientific Reports, Journal of General Virology, PLOS One, Viruses, Nephron, The Veterinary Journal, Proteome Science, American Journal of Animal and Veterinary Sciences, Future Virology, Oxidative medicine and cellular longevity, Scientific World Journal

## Organisation of conferences

Assisting role (organizer Professor Olli Vapalahti) in organization of 26th Sigrid Jusélius International Symposium: "Emerging infections", June 7-10, 2015, Helsinki, Finland (http://www.sigridjuselius.fi/emerging_infections/)

Assisting role (organizer Dr. Hilkka Lankinen, and Finnish peptide society) in organization of 30th European Peptide Symposium, 31.8.-5.9.2008, Helsinki, Finland

## Prices and awards

**Young virologist 2014,** Finnish Foundation for Research on Viral Diseases
**Best Oral Presentation**, Young Scientist Session, 10th Finnish Peptide Symposium 2010

### Contributions to books

Co-editor in Peptides 2008, Conference proceeding of 30th European Peptide Symposium, 2008

### Invention disclosures and patents

1. "Protein l based bioassay method for determining presence of soluble antibodies in a sample and kit therefor", Inventors: Klaus Hedman, Jussi Hepojoki, Satu Hepojoki, Antti Vaheri, Olli Vapalahti WO2015128548 A1, EP3111218A1, https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2015128548&recNum=1&maxRec=&office=&prevFilter=&sortOption=&queryString=&tab=PCT+Biblio.
2. Invention disclosure on novel serodiagnostic approach, 2013.
3. Co-applicant in a patent describing a novel diagnostic method, 2012.

### Taxonomic proposals

Stenglein MD, DeRisi JL, Bao Y, **Hepojoki J**, Sironen T, Vapalahti O, Hetzel U. Create a new genus, Reptarenavirus, comprising three new species in the family *Arenaviridae*. (http://www.ictvonline.org/proposals-14/2014.011a-dV.A.v2.Reptarenavirus.pdf)

Hepojoki J, Salmenperä P, Sironen T, Hetzel U, Korzyukov Y, Kipar A, Vapalahti O, Maes P, and the ICTV Arenaviridae Study Group. One (1) new genus including one (1) new species in the family Arenaviridae, 2017. (https://talk.ictvonline.org/files/proposals/animal_dsrna_and_ssrna-_viruses/m/animal_rna_minus_ec_approved/7041)

Hepojoki J, Sironen T, Bào Y, Maes P, and the ICTV Arenaviridae Study Group. Two (2) new species in the genus Reptarenavirus (Arenaviridae) and renaming of three (3) species, 2017. (https://talk.ictvonline.org/files/proposals/animal_dsrna_and_ssrna-_viruses/m/animal_rna_minus_ec_approved/6951)