

CURRICULUM VITAE

Dr. Tessa E. F. Quax



CURRENT MAJOR SCIENTIFIC INTERESTS

Archaeal virus-host interactions and **archaeal cell biology: Infection mechanisms** of archaeal viruses, such as viral entry and egress, interplay of viruses with the archaeal cell envelope and cell surface structures, spatiotemporal organization of the viral infection process in the archaeal cell, virus evolution.

CURRENT POSITION

2021-present **Associate Professor**, adjunct-hoogleraar, Biology of Archaea and Viruses, Groningen Biomolecular Sciences and Biotechnology Institute, University of Groningen, NL.

PREVIOUS POSITION(S)

- 2019-2021 **Emmy Noether Research Group Leader** at Faculty of Biology of the Freiburg University. Subject: *Archaeal virus-host interactions*.
- 2018-2019 Principal investigator at the Faculty of Biology of the Freiburg University. This position was funded by the **Margarete von Wrangell Habilitations Programm**. Subject: *Motility and intracellular organization of euryarchaea*.
- 2018 **Post-doctoral Carl Zeiss fellow** at Freiburg University, Germany in the group of Prof. Dr. Albers. This position is funded by a personal grant from the Carl-Zeiss Stiftung. Subject: *Chemotaxis and motility in euryarchaea*.
- 2014-2017 **Post-doctoral EMBO and Marie-Curie fellow at Freiburg University**, in the group of Prof. Dr. Albers. This position was funded by a personal post-doctoral EMBO grant from the European Molecular Biology Organization (EMBO) and a Marie-Curie Fellowship from the European Commission. Subject: *Chemotaxis and motility in euryarchaea*.
- 2013-2014 **Pegasus Marie-Curie Fellow at Leuven University**, Belgium, within the Division of Gene Technology headed by Prof. Dr. Lavigne. This position was funded by a

personal post-doctoral Pegasus grant from the Flemish Scientific Organisation (FWO). Subject: *Characterisation of protein functions of the archaeal virus SIRV2*.

EDUCATION

- 2018-2021 **Habilitation** at Freiburg University completed on June 15th, 2021
- 2009- 2013 **PhD student, double degree** at the Institut Pasteur (Paris, France), under supervision of Prof. dr. Patrick Forterre and Dr. David Prangishvili and at Wageningen University (The Netherlands), under supervision of Prof. dr. John van der Oost. Title of project: *“Archaeal virus host interactions”*.
Date of defence: 06-12-2013. Judicium: *très honorable* (Top 5% of PhD students).
- 2007- 2009 **Prestige Research Master** Biomolecular sciences, of the Graduate School Life Sciences of Utrecht University, the Netherlands. (*cum laude*. Top 10% of students).
- 2007- 2009 Xtrack extracurricular Master program for outstanding students of the Graduate School of Life Sciences of Utrecht University. (Top 2% of students).
- 2004-2007 **Bachelor of Science** (Biology), Utrecht University, the Netherlands. (*cum laude*, Top 10% of students).

HONOURS AND AWARDS

2022

- **Beijerinck Premie 2022**, awarded by the Royal Netherlands Academy of Arts and Sciences (KNAW) to a young scientist performing excellent virus-related research, the Netherlands (€25000)

2021

- **KNAW Early Career Award** in the domain ‘natural sciences and engineering’, one of 3 awards in this domain that are awarded yearly by the Royal Netherlands Academy of Arts and Sciences to early career scientist with innovative and original ideas, the Netherlands (€15000)
- **Hector Research Career Development Award (Hector RCD Award)**, awarded by the Hector Fellow Academy, Germany (€25000)

2015

- **FEMS 2015 Poster prize**, awarded at the FEMS meeting in Maastricht, the Netherlands. (€ 500)

2014

- Louist Forest prize for **best PhD thesis in the Life Sciences** from 2013. This prize is one of the “prix solennels de chancellerie des universités de Paris” and is awarded yearly to two

young doctors who obtained their PhD from one of the ~20 Parisian universities and grand ecoles. Awarded by the Chancellerie de Paris (€10.000).

- Westenbrink prize for **best thesis in the Biochemistry and Molecular Biology** from the Netherlands in the academic year 2013-2014. Awarded by the NVBMB (Dutch Society for Biochemistry and Molecular Biology) (€2.000).
- One of two **honorary mentions of the Nat Sternberg thesis prize**, awarded by the 'Molecular biology of Phage and Bacteria' meeting organizers.

2013

- **Poster prize** received at the International Gordon Research Conference on "Archaea", Lucca, Italy (2013). (\$ 200).

2012

- "**Best poster award**" received at the International meeting "Molecular Biology of Archaea 3", Marburg, Germany (2012). (€ 250)

2009

- "**Best research proposal**" Xtrack award of the Graduate School of Life Sciences of Utrecht University. (€ 5.000).
- "**Best oral presentation**" as judged by the audience at the Biomolecular Sciences Seminar Day, Utrecht University. (€ 250)

RESEARCH GRANTS

2023

- **Vidi** grant from the Dutch Science Organization (NWO), €800.000
- **Coordinator of Human Frontier Science Program** Young Investigator grant (\$ 1.500.000 total, \$375.000 individual)
- **Coordinator of Marie-Curie Doctoral Network** ARCTECH funded by the European Commission (€2.700.000 total €580.000 individual)

2022

- **ERC starting grant**, awarded by the European Research Council (€1.500.000)

2021

- Individual Project in **Priority Program 'Prokaryotic Viruses'**, SPP 2330, from the German Science Foundation (DFG) (€263.000)
- **Hector RCD Award** from the Hector Fellow Academy. (€189.000)

2019

- **Emmy Noether Independent Research grant**, from the German Science Foundation (DFG). (€1.500.000)

2018

- **Fellowship** from the **Margarete von Wrangell Habilitations Programm**, from the Ministerium für Wissenschaft Forschung und Kunst Baden-Württemberg (€350.000)

2017

- **Carl Zeiss Post-doctoral fellowship**, from the Ministerium für Wissenschaft Forschung und Kunst Baden-Württemberg (€180.000)

2013

- **Marie-Curie Intra European post-doctoral fellowship** of the European Commission. (€162.000)
- **EMBO post-doctoral fellowship** awarded by the European Molecular Biology Organization (EMBO) (€74.000)
- **Rubicon post-doctoral fellowship** of the Dutch Science Organisation (NWO) (€130.000)
- **Pegasus Marie-Curie post-doctoral fellowship** awarded by the Flemish Scientific Organisation (FWO) (€70.000)

2009

- **PhD grant** for three years from the French government via University Paris VI.

TRAVEL GRANTS

2015

- FEMS (Federation of European Microbiological Societies) **Young Scientists Meeting Grant** to attend the 'FEMS' meeting in Maastricht, the Netherlands. (€ 500)

2014

- **Travel grant** to attend the Viruses of Microbes meeting in Zurich, Switzerland (€400).

2013

- FEMS (Federation of European Microbiological Societies) **Young Scientists Meeting Grant** to attend the 'Thermophiles' meeting in Regensburg, Germany. (€ 600)
- SynMikro short term **exchange fellowship** to support a research visit of one month at the Max Planck Institute Marburg. Awarded by the scientific board of the Center for Synthetic Microbiology in Marburg (2013). (€ 2500)
- Van Gogh **travel grant** for French-Dutch scientific collaboration. Awarded by the French Dutch Academy together with the Dutch Science Organisation (NWO). (€2500)

2012

- Van Gogh **travel grant** (€2500)

2011

- Eole **travel grant** for scientists to strengthen bonds between France and The Netherlands (2011). Awarded by the French Dutch Academy (€ 1000).

2010

- FEMS (Federation of European Microbiological Societies) **Young Scientists Meeting Grant** to attend the 'Extremophiles' meeting in Ponta Delagada, Portugal. (€ 600)

PUBLICATIONS

*, corresponding author. #, equal contribution

H-index: 18. i10 index: 27. Total number of citations: 1661. (Google Scholar, July 2023)

1. Schwarzer S, Hackl T, Oksanen HM, **Quax T.E.F.*** (2023) Archaeal host cell recognition and viral binding of HFTV1 to its Haloferax host. **mBio**. 14(1):e0183322.
2. Patro M, van Wolferen M, Ye X, Albers SV, **Quax T.E.F.** (2022) Methods to analyse motility in Eury- and Crenarchaea. **Methods Mol Biol**. 2522:373-385
3. Aguirre Sourrouille Z, Schwarzer S, Lequime S, Oksanen HM, **Quax T.E.F.*** (2022) The viral susceptibility of the Haloferax species. **Viruses**. 14(6):1344
4. Altegoer F, **Quax T.E.F.**, Weiland P, Nußbaum P, Giammarinaro P.I., Patro M, Li Z, Oesterhelt D, Grninger M, Albers SV, Bange G. (2022) Structural insights into the mechanism of archaeal rotational switching. **Nat Commun**. 13(1):2857.
5. **Quax T.E.F.***, de Paepe M., Holmfeldt K. (2021) Viruses of Microbes 2020 : the latest conquests on Viruses of Microbes. **Viruses**, 13(5):802
6. Tittes C, Schwarzer S, Pfeiffer F, Dyall-Smith M, Rodriguez-Franco M, Oksanen H.M., **Quax T.E.F.*** (2021) Cellular and genomic properties of *Haloferax gibbonsii* LR2-5, the host of euryarchaeal virus HFTV1. **Frontiers in Microbiology**, 16;12:625599.
7. Lewis A.M., Recalde A, Bräsen C, Counts J.A., Nussbaum P, Bost J, Schocke L, Shen L, Willard D.J., **Quax T.E.F.**, Peeters E, Siebers B, Albers SV, Kelly R.M. (2021) The biology of thermoacidophilic archaea from the order Sulfolobales. **FEMS Microbiol Rev**. 2021 Jan 21:fuaa063
8. Schwarzer S, Rodriguez-Franco M, Oksanen H.M., **Quax T.E.F.*** (2021) Growth phase dependent cell shape of Haloarcula. **Microorganisms**. 9(2):231
9. Tittes C, Schwarzer S, **Quax T.E.F.*** (2021) Viral hijack of filamentous surface structures in Archaea and Bacteria. **Viruses**. 13(2):164
10. Knüppel R, Trahan C, Kern M, Wagner A, Grünberger F, Hausner W, **Quax T.E.F.**, Albers SV, Oeffinger M, Ferreira-Cerca S. (2021) Insights into synthesis and function of KsgA/Dim1-dependent rRNA modifications in archaea. **Nucleic Acids Res**. doi: 10.1093/nar/gkaa1268
11. Nussbaum F, Ithurbide S, Walsh J, Patro M, Rodriguez M, Curmi P, Duggin I*, **Quax T.E.F.***, Albers S.V.* (2020) An oscillating MinD protein determines the cellular positioning of motility machinery in archaea. **Current Biology**. 13:S0960-9822(20)31443-3

12. Kinosita Y, Mikami N, Li Z, Braun F, **Quax T.E.F.**, van der Does C, Ishmukhametov, Albers S.-V., Berry R.M., (2020) Motile ghosts of the halophilic archaeon, *Haloferax volcanii*. **Proceedings of the National Academy of Sciences USA**. 117(43):26766-26772
13. Li Z., Rodriguez-Franco M, Albers S.-V.* , **Quax T.E.F.*** (2020). The switch complex ArlCDE connects the chemotaxis system and the archaellum. **Molecular Microbiology**. 114(3):468-479.
14. Mikhail G Pyatibratov M.G. , Syutkin A.S., **Quax T.E.F.**, Melnik T.N., Papke R.T., Gogarten J.P., Kireev I.I., Surin A.K., Beznosov S.N., Galeva A.V., Fedorov O.V. (2020). Interaction of Two Strongly Divergent Archaellins Stabilizes the Structure of the Halorubrum Archaellum. **MicrobiologyOpen**. Apr 21:e1047
15. Gambelli L, Meyer B.H., McLaren M, Sanders K, **Quax T.E.F.**, Gold V.A.M., Albers S.V., Daum B (2019) Architecture and modular assembly of Sulfolobus S-layers revealed by electron cryotomography. **Proceedings of the National Academy of Sciences USA**. 116(50):25278-25286
16. Li Z, Kinosita Y, Rodriguez-Franco M, Nußbaum P, Braun F, Delpech F, **Quax T.E.F.***, Albers SV*. (2019) Positioning of the Motility Machinery in Halophilic Archaea. **Mbio** 10(3). pii: e00377-19
17. Braun F, Thomalla L, van der Does C, **Quax T.E.F.**, Allers T, Kaever V, Albers SV (2019) Cyclic nucleotides in archaea: Cyclic di-AMP in the archaeon *Haloferax volcanii* and its putative role. **MicrobiologyOpen**. 18:e829
18. **Quax T.E.F.***, Albers S.-V., Pfeifer F. (2018) Taxis in archaea. **Emerging Topics in Life Sciences**. Nov 14, 2018
19. Syutkin A.S., van Wolferen M., Surin A.K., Albers S.V., Pyatibratov M.G., Fedorov O.V., **Quax T.E.F.*** (2018) Salt dependent regulation of archaellins in *Haloarcula marismortui*. **Microbiology Open**. 8(5):e00718
20. **Quax T.E.F.**, Altegoer F., Rossi F., Li Z., Rodriguez-Franco M., Kraus F., Bange G., Albers S.-V. (2018). Structure and function of the archaeal response regulator CheY. **Proceedings of the National Academy of Sciences USA**. 115(6):E1259-E1268
21. Chaudhury P.#, **Quax T.E.F. #**, Albers S.-A. (2017) Versatile cell surface structures of archaea. **Molecular Microbiology**. 107 (3):298-311.
22. **Quax T.E.F.*** & Daum B. (2017) Structure and assembly mechanism of Virus-Associated Pyramids. **Biophysical Reviews**. 4 Dec. 2017

23. Debarbieux L., Fisher M., **Quax T.E.F.***. (2017) Viruses of Microbes. **Viruses**. 2017 Sep 20;9(9)
24. Claassens N.J., Siliakus M.F., Spaans S.K., Creutzburg S., Nijse B, Schaap PJ, **Quax T.E.F.**, van der Oost J. Improving heterologous membrane protein production in Escherichia coli by combining transcriptional tuning and codon usage algorithms. **PLOS One**, 2017 Sep 13;12(9):e0184355
25. Peeters E., Boon M., Rollie C., Willaerts R. G., Voet M., White M., Prangishvili D., Lavigne D, **Quax T.E.F.***. (2017) DNA-interacting characteristics of the archaeal Rudiviral protein SIRV2_Gp1. **Viruses**, Jul 18:9(7).
26. Quax T.E.F., Claassens N.J., Söll, van der Oost J. (2015). Codon bias as a means to fine-tune protein expression. **Molecular Cell**. 2015 Jul 16;59(2):149-61
27. Quemain E. & Quax T.E.F. *, (2015) Archaeal viruses at the cell envelope: entry and egress. **Frontiers in Microbiology**, 6:552.
28. Pina M., Basta T., **Quax T.E.F.**, de Cian A., Baconnais S., Cortez D., Lambert S., Le Cam E., Bell S.D., Forterre F. and Prangishvili D. (2014). Eukaryotic traits of the genome replication mechanism of the hyperthermophilic archaeal virus AFV1. **Molecular Microbiology**, 92(6):1313-25
29. Daum B. #, **Quax T.E.F. #**, Sachse M., Mills D., Reimann J., Yildiz Ö., Häder S., Saveanu C., Forterre P., Albers S.-V., Kühlbrandt W. and Prangishvili D (2014). Supramolecular organisation and self-assembly of a universal pyramidal membrane remodelling system. **Proceedings of the National Academy of Sciences USA**, 111(10):3829-34
30. Quemain E., Lucas S., Daum B., **Quax T.E.F.**, Kühlbrandt W., Forterre P., Albers S.-V., Prangishvili D. and Krupovic M. (2013). First insights into the entry process of hyperthermophilic archaeal viruses. **Journal of Virology**, 87:13379-85
31. **Quax T.E.F.***, Wolf Y.I., Koehorst J.J., Wurtzel O., van der Oost R., Ran W., Blombach F., Makarova K.S., Brouns S.J.J., Forster A.C., Wagner E.G.H., Sorek R., Koonin E.V. and van der Oost J.* (2013). Differential translation tunes uneven production of operon-encoded proteins. **Cell Reports**, 4:938-44.
32. **Quax T.E.F.***, Voet M., Sismeiro O., Dillies M.-A., Jagla B., Coppee J.-Y., Sezonov G., Forterre., van der Oost J., Lavigne R. and Prangishvili P.* (2013) Massive activation of archaeal defense genes during viral infection. **Journal of Virology**, 87(15): 8419-28

33. Snyder J.C., Brumfield S.K., Kerchner K.M., **Quax T.E.F.**, Prangishvili D. and Young M.J. (2013) Insights into a viral lytic pathway from an archaeal virus-host system. **Journal of Virology**, Feb;87(4):2186-92
34. Prangishvili D. and **Quax T.E.F.** (2011). Exceptional virion release mechanism: one more surprise from Archaeal viruses. **Current Opinion in Microbiology**, 4(3):315-20.
- Illustration from the article was used as cover image for this volume of Current Opinion in Microbiology.
 - The same illustration was included in the 'Picture show' from Cell Press featured as 'Petal Power'.
 - Illustration was used in the journal 'Nature', 'News and comment' section: 'Five big mysteries about CRISPR', January 2017.
35. **Quax T.E.F.**, Lucas S., Reimann J., Pehau-Arnaudet G., Prevost M.-C., Forterre P., Albers S.-V. and Prangishvili, D (2011). Simple and elegant design of a virion egress structure in Archaea. **Proceedings of the National Academy of Sciences USA** 108(8): 3354-3359
- Featured as 'Editors choice' in Science, 'Viral Escape Route' February 25, 2011
 - Featured in the French scientific magazine for general public 'Sciences et avenir', 2011.
36. **Quax T.E.F.**, Krupovič M., Lucas S., Forterre P. and Prangishvili, D. (2010). The Sulfolobus rod-shaped virus 2 encodes a prominent structural component of the unique virion release system in Archaea. **Virology** 404:1-4
37. Bize A., Karlsson E.A., Ekefjård K., **Quax T.E.F.**, Pina M., Prevost M.-C., Forterre P., Tenaillon O., Bernander R. and Prangishvili D. (2009). A Unique Virus Release Mechanism in the Archaea. **Proceedings of the National Academy of Sciences USA** 106(27):11306-11

BOOK CHAPTERS

- 1) **Quax T.E.F.***, Albers S.-A. (2017) The role of cell surface structure in Archaea. 'Biocommunication of Archaea' Springer, Dordrecht, 2017

PATENTS

Quax T.E.F., Lucas S., Forterre P. and Prangishvili D. *Homomultimeric structure by assembly of SIRV2 P98 proteins or P98 variants, conjugate and uses thereof*.
International patent: PCT/EP2012/050902, filed January 20, 2012.

PRESENTATIONS AT CONFERENCES

2023

- **Invited speaker** at the KNVM (Koninklijke Nederlandse Vereniging voor Microbiologie) spring meeting.
- **Invited key note speaker** at the Annual Symposium of the Belgian Society for Microbiology

2022

- **Invited oral presentation** at the international Viruses of Microbes meeting, Guimaraes, Portugal
- **Invited oral presentation** at the international Molecular Biology of Archaea meeting in Frankfurt, Germany
- **Invited speaker** for the iVoM series, organized by the International Society for Viruses of Microbes (ISVM)

2021

- **Chair and organizer** of the mini-symposium on 'Viruses of Microbes' during the online annual conference of the Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM), Germany.
- **Oral presentation**, SPP 2330 kick-off meeting, Cologne, Germany.

2020

- **Invited oral presentation** at the online Archaea Café, organized by the VAAM Special group on archaea.
- **Invited oral presentation** at the online International **Molecular Biology of Archaea** Meeting.
- **Invited oral presentation** at the KNVM (Koninklijke Nederlandse Vereniging voor Microbiologie) online spring meeting.
- **Invited oral presentation** at the Forterre-Prangishvili celebration meeting at Institut Pasteur, Paris, France.

2019

- **Selected oral presentation and Session Chair** at the annual conference of the VAAM, Wolfsburg, Germany.

2018

- **Invited session chair**, Viruses of Microbes Meeting, Wroclaw, Poland.
- **Selected poster presentation and Session Chair**, Molecular Biology of Archaea, Vienna, Austria.
- **Selected oral presentation** at the annual conference of the VAAM, Wolfsburg, Germany.
- **Selected oral presentation**, UK Archaea Workshop, Lancaster, UK.

2016

- **Selected oral presentation**, Molecular Biology of Archaea, London, UK.
- **Selected oral presentation**, Viruses of Microbes Meeting, Liverpool, UK.
- **Invited oral presentation**, Young Scientist Meeting Symposium, Dundee, UK.
- **Invited guest lecture** at the University of StAndrews, UK.
- **Poster presentation** at the Marie-Curie meeting in Venice, Italy.

2015

- **Invited oral presentation** at Zing Conference “Regulating with RNA in Bacteria and Archaea”, Cancun, Mexico.
- **Poster presentation** on the annual international FEMS meeting in Maastricht, the Netherlands.
- **Poster presentation** on the Gordon Research Conference on ‘Archaea’, Boston, USA.
- **Selected oral presentation** at the annual conference of the VAAM.

2014

- **Invited guest lecture** at Biology department of the Free University of Brussels, Belgium.
- **Selected oral presentation** at the Molecular Biology of Archaea 4 meeting in Paris, France.
- **Selected poster presentation** at the 3rd International meeting on Viruses of Microbes, Zurich, Switzerland.
- **Invited guest lecture** at the Microbiology department of Otago University in Dunedin, New Zealand.

2013

- **Selected poster presentation** on the Gordon Research Conference on ‘Archaea’, Lucca, Italy.
- **Oral presentation** on the Microbiology Department days of the Institut Pasteur, Vichy, France.
- **Invited oral presentation** at the Virology Seminar series of Wageningen University, The Netherlands.

2012

- **Selected poster presentation** on the meeting international Molecular Biology of Archaea 3, Marburg, Germany.
- **Invited oral presentation** on the 2nd International meeting on Viruses of Microbes, Brussel, Belgium.
- **Poster presentation** ‘Chemistry in Relation to Biology and Medical Sciences’ meeting of the Dutch Science Organisation, Veldhoven, The Netherlands.
- **Selected poster presentation** on the Microbiology Department days of the Institut Pasteur, Paris, France.

2011

- **Selected oral presentation** on the French Archaea Days, Paris, France.
- **Selected oral presentation** on the national meeting on Molecular Genetics organized by the Dutch science organization, Lunteren, The Netherlands.
- **Selected oral presentation** on the 11th International Thermophiles meeting, Montana, USA.

2010

- **Selected poster presentation** on the 8th International Conference on Extremophiles, Ponta Delagada, Portugal.

- Selected **poster presentation** on the Microbiology Department days of the Institut Pasteur, Paris, France.

INTERNATIONAL RESEARCH VISITS

- 2015 One week stay at **Leuven University (Belgium)** in the group of Prof. Lavigne.
Goal: conduct protein-interaction experiments.
- 2014 Three week research visit to the **University of St Andrews (United Kingdom)** in the group of Prof White. Goal: investigate protein-DNA interactions of archaeal viral proteins.
- 2014 One week visit to **Nottingham University (United Kingdom)** in the group of Dr. Allers.
Goal: learn genetics of Haloarchaea.
- 2013 One week stay at **Leuven University (Belgium)** in the group of Prof. Lavigne.
Goal: conduct protein-interaction experiments.
- 2012 Two research visits of two weeks at the **Max Planck Institute of Biophysics in Frankfurt (Germany)** in the group of Prof. Kühlbrandt. Goal: perform cryo-microscopy experiments.
- 2012 One week visit to the **Max Planck Institute of Terrestrial Microbiology in Marburg (Germany)** in the group of Prof. Albers. Goal: generate archaeal expression mutants.
- 2010 Three week stay in the group of Prof Johnson of **The Scripps Institute, La Jolla, USA**. Goal: perform whole cell cryo- electron tomography
- 2010 Three week visit to the **Max Planck Institute of Terrestrial Microbiology in Marburg (Germany)** in the group of Prof. Albers. Goal: training in genetics of archaea and generation of mutants

BOARD MEMBERSHIP AND EDITORSHIP

- 2021- present Member of the **scientific advisory board** of International Society of Viruses of Microbes (ISVM)
- 2021- 2023 **Chair** of the **scientific advisory board** of the ISVM
- 2020- present **Spokesperson** for the Special Group ‘Viruses of Microbes’ of the VAAM (German Microbiology Society)
- 2020- present **Guest editor** of the special issue ‘Viruses of Microbes’ of the journal ‘Viruses’, MDPI.
- 2020/2022 **Review panel member**, doctoral programme in Microbiology and Biotechnology, Helsinki University, Finland.
- 2019- present **Vice-chair** and **chair** of the Gordon Research Conference ‘Archaea’ 2023 and 2025.
- 2019- 2022 **Associate editor** of the journal BMC Molecular and Cell Biology
- 2019- present **Associate editor** of the journal Frontiers Biology of Archaea
- 2017- 2018 Member of the **scientific advisory board** of the Viruses of Microbes 2018 meeting.

- 2016-2017 **Guest editor** of the special issue ‘Viruses of Microbes’ of the journal ‘Viruses’, MDPI.
- 2015- 2020 **Board member** of the ISVM

INSTITUTIONAL RESPONSIBILITIES

- 2022-present **Board member** of the GBB (Groningen Biomolecular Sciences and Biotechnology Institute)
- 2021-present **Member** of 4 hiring committees of assistant to full professors at GBB.
- 2019 **Member** of hiring committee for full professor in cell biology at Freiburg University

REVIEWING ACTIVITIES

Besides reviewing for several journals in my field (i.e. Mol Mic, PNAS, J Virol) I also regularly review grant applications for organizations from different countries (i.e. from DFG, NIH, FWF).

COURSES

- 2022 **UTQ (University Teaching Qualification)** of the Dutch Universities.
- 2020 **Online teaching**, Higher Education Training Program (HDZ), Baden Württemberg.
- 2019 **Successful leadership** in science, Freiburg University
- 2017 **Supervision and leadership** course for young group leaders, Freiburg University
- 2015 **EMBO lab management** course for post-docs, Heidelberg.
- 2015 **Light Microscopy course** from the Life Imaging Center of Freiburg University,
- 2014 **Scientific communication** with the general public, Free University of Brussels.
- 2013 **Scientific writing** for a general public, Wageningen University.
- 2013 ‘Competence assessment and **career orientation**’ course, Wageningen University.
- 2012 Safe handling of **radioactive material** (level 5B), Wageningen University.
- 2010 Hands-on course ‘**Genetics of Archaea**’, Max Planck Institute, Marburg.
- 2010 **EMBO course on Electron Microscopy & Stereology** in Cell Biology, University Oslo.

TEACHING EXPERIENCE

- 2022 **Lecturer** in the Master course ‘Advanced Genetic Engineering’ at University of Groningen (RUG).
- 2021 **Lecturer** in the Master course ‘Biotechnology’ for the educational track at Freiburg University.

- 2021 **Lecturer** in the Bachelor course Profilmodul Microbiology at Freiburg University.
- 2020 **Lecturer** in the Bachelor course Profilmodul Microbiology at Freiburg University.
- 2019 **Supervisor** for students in the Orientierungsmodul Modul Chemie & Microbiology at Freiburg University.
- 2019 Supervision of **Practical course** in Grundmodul Microbiology at Freiburg University
- 2019 **Lecturer** in the Bachelor course Profilmodul Microbiology at Freiburg University.
- 2018 **Supervisor** for students in the Orientierungsmodul Modul Chemie & Microbiology at Freiburg University.
- 2018 Supervision of **Practical course** in Grundmodul Microbiology at Freiburg University
- 2018 **Lecturer** in the Bachelor course Profilmodul Microbiology at Freiburg University.
- 2017 **Supervisor** for students in the Orientierungsmodul Modul Biochemie & Mikrobiology at Freiburg University.
- 2017 **Teaching assistant** in the Vertiefungsmodul Microbiology at Freiburg University.
- 2016 **Supervisor** for students in the Orientierungsmodul Modul Chemie & Microbiology at Freiburg University.
- 2016 **Teaching assistant** in the Vertiefungsmodul Microbiology at Freiburg University.
- 2015 **Lecturer** in the master course “prokaryotes and biotechnology” at Leuven University.
- 2015 **Teaching assistant** in the Vertiefungsmodul microbiology at Freiburg University.
- 2015 **Supervisor** for students in the Orientierungsmodul Chemie & Microbiology at Freiburg University.
- 2014 **Lecturer** in the master course “prokaryotes and biotechnology” at Leuven University.
- 2011 **Teaching assistant** for the master course “Advanced practical course Microbiology”, Wageningen UR.
- 2008 **Member** of the **programme committee** of the module “Molecules in life” of Junior College Utrecht in collaboration with Utrecht University.
- 2008 **Teaching assistant** for the Bachelor course “Biodiversity”, Utrecht University.

SUPERVISION OF STUDENTS

	<i>Start date</i>	<i>Student name</i>	<i>Institution</i>	<i>Country</i>	<i>note</i>
<i>PhD</i>	2022	A.Schontag	University of Groningen	The Netherlands	First promotor
	2022	B. Kuiper	University of Groningen	The Netherlands	First promotor
	2021	Z. Aguirre-Sourrouile	University of Groningen	The Netherlands	First promotor
	2019	S. Schwarzer	Freiburg University	Germany	First promotor
	2019	C. Tittes	Freiburg University	Germany	First promotor
<i>MSc</i>	2016	Z. Li	Freiburg University	Germany	Co-promotor
	2023	J.de Jong	University of Groningen	The Netherlands	
	2022	B.Armonaite	University of Groningen	The Netherlands	
	2022	S.Buscher	University of Groningen	The Netherlands	
	2021	V Grelat	Freiburg University	Germany	
	2018	D. Gopan	Freiburg University	Germany	
	2017	A. Alsbach	Freiburg University	Germany	
	2016	F. Braun	Freiburg University	Germany	
	2015	P. Nussbaum	Freiburg University	Germany	
	2015	N. van der Kolk	Freiburg University	Germany	
	2014	M. Boon	Leuven University	Belgium	
	2013	E. Rensen	Institut Pasteur	France	

BSc

2012	J. Koehorst	Wageningen University	The Netherlands
2011	J. Chaligne	Insitut Pasteur	France
2023	O.van Laar	University of Groningen	The Netherlands
2023	L.Mijering	University of Groningen	The Netherlands
2021	J Petters	Freiburg University	Germany
2020	N. Bubeck	Freiburg University	Germany
2019	M. Geiger	Freiburg University	Germany
2017	S. Bertolotti	Freiburg University	Germany
2016	S. Franz	Freiburg University	Germany
2016	X. Wang	Freiburg University	Germany
2014	M. Polman	Leuven University	Belgium