

Curriculum Vitae

Personal information Keven Lothert

Work experience

- 10/2024-ongoing Quality assessor for ATMPs, Paul-Ehrlich-Institut, Langen, Germany
- 03/2024-09/2024 Scientist BioProcess development, CSL Behring Innovation GmbH (contingent position via Proclinical GmbH), Marburg, Germany, downstream process development for plasma products
- 08/2021-12/2023 Scientific assistant (Post-Doc), University of applied sciences Mittelhessen (THM), Giessen, Germany, research on downstream process and analytics development for vaccines and viral vectors.
- 08/2017-07/2021 Scientific assistant (PhD student) University of applied sciences Mittelhessen (THM), Giessen, Germany, research on downstream process development for vaccines and viral vectors.
- 11/2020-12/2020 (Secondary employment) freelance consultant, University hospital of Tübingen, Tübingen, Germany, consultancy and assistance in downstream process applications of viral vectors.
- 10/2016-03/2017 Engineer/technical assistant, Glycotope GmbH, Berlin, Germany, analytics of posttranslational modifications of glycoproteins.
- 10/2015-10/2016 Research project and master thesis, Glycotope GmbH, Berlin, Germany, analytics of posttranslational modifications of glycoproteins.
- 04/2014-08/2014 Internship and bachelor thesis, AZ Biopharm, Berlin, Germany, bioanalytical method development for small molecules.
- 10/2009-08/2010 civil service and subsequent part-time work, Helios hospital, Berlin, Germany, assistance in the hospitals' pharmacy.

Education and training

- 08/2017-03/2022 Doctor of Engineering (Dr.-Ing.), Graduate Centre for Engineering Sciences at the Research Campus of Central Hessen, Giessen, Germany, Biotechnology, particularly bioprocess development.
- 10/2014-10/2016 Master of Science (M.Sc.), BHT University of applied sciences, Berlin, Germany, biotechnology.
- 10/2011-08/2014 Bachelor of Science (B.Sc.), HBRS University of applied Sciences, Rheinbach, Germany, Forensic sciences.

Additional information

Publications

1. Doctoral dissertation
 - i. Lothert, K. Steric exclusion chromatography: Advancement of a laboratory-based platform technology into a key component of viral vector and vaccine production processes (2021) DOI: 10.22029/jlupub-619
2. Paper
 - i. Lothert, K.; Sprick, G.; Beyer, F.; Lauria, G.; Czermak, P.; Wolff, M.W. Membrane-based steric exclusion chromatography for the purification of a recombinant baculovirus and its application for cell therapy (2020) J. Virol. Methods 275 113756 DOI: 10.1016/j.jviromet.2019.113756
 - ii. Lothert, K.; Pagallies, F.; Feger, T.; Amann, R.; Wolff, M.W. A selection of possible chromatographic downstream processing unit operations for Orf virus purification (2020) J. Biotechnol. 323, 62-72 DOI: 10.1016/j.jbiotec.2020.07.023
 - iii. Lothert, K.; Pagallies, F.; Eilts, F.; Sivanesapillai, A.; Hardt, M.; Moebus, A.; Feger, T.; Amann, R.; Wolff, M.W. A scalable downstream process for the purification of Orf virus J. Biotechnol. 323 (2020) 221-230 DOI: 10.1016/j.jbiotec.2020.08.014
 - iv. Lothert, K.*; Offersgaard, A.*; Pihl, A.F.; Mathiesen, C.K.; Jensen, T.B.; Alzua, G.P.; Fahnoe, U.; Bukh, J.; Gottwein, J.M.\$; Wolff, M.W.\$ Development of a downstream process for the production of an inactivated whole hepatitis C virus vaccine (2020) Sci. Rep. 10:16261 DOI: 10.1038/s41598-020-72328-5
*,\$ equal contributions
 - v. Lothert, K.; Eilts, F.; Wolff, Michael W. Quantification methods for viruses and virus-like particles applied in biopharmaceutical production processes (2022) Expert Rev. Vaccines 21 (8) DOI: 10.1080/14760584.2022.2072302
 - vi. Eilts, F.; Steger, M.; Lothert, K.; Wolff, M.W. The Suitability of Latex Particles to Evaluate Critical Process Parameters in Steric Exclusion Chromatography (2022) Membranes 12 (5):488 DOI: 10.3390/membranes12050488
 - vii. Eilts, F.; Lothert, K.; Orbay, S.; Pagallies, F.; Amann, R.; Wolff, M.W. A Summary of Practical Considerations for the Application of the Steric Exclusion Chromatography for the Purification of the Orf Viral Vector (2022) Membranes 12 (11):1070 DOI: 10.3390/membranes12111070
 - viii. Lothert, K.; Bagrin, E.; Wolff, M.W. Evaluating Novel Quantification Methods for Infectious Baculoviruses (2023) Viruses 15, 998 DOI: 10.3390/v15040998
 - ix. Lothert, K.*; Harsy, Y.*; Endres, P.; Mueller, E.; Wolff, M.W. Evaluation of restricted access media for the purification of cell culture-derived Orf viruses (2023) Eng. Life. Sci. e2300009 DOI: 10.1002/elsc.202300009
* equal contributions
 - x. Lothert, K.; Wolff, M.W. Affinity and Pseudo-Affinity Membrane Chromatography for Viral Vector and Vaccine Purifications: A Review (2023) Membranes 13 (9):770 DOI: 10.3390/membranes13090770
 - xi. Eilts, F.; Harsy, Y.M.J.; Lothert, K.; Pagallies, F.; Amann, R.; Wolff, M.W.; An investigation of excipients for a stable Orf viral vector formulation (2023) Virus Res. 336 (e199213) DOI: 10.1016/j.virusres.2023.199213

3. Book chapters
 - i. Hoffmann, D.; Leber, J.; Loewe, D.; Lothert, K.; Oppermann, T.; Zitzmann, J.; Weidner, T.; Salzig, D.; Wolff, M.W.; Czermak, P. Purification of new biologicals using membrane-based processes in Membrane Processes in the Pharmaceutical and Biotechnological Field (Editor: Basile, A.) (2018) DOI: 10.1016/B978-0-12-813606-5.00005-1
 - ii. Lothert, K.*; Dekevic, G.*; Loewe, D.; Salzig, D.; Czermak, P.; Wolff, M.W. Up-Downstream processing of biological nanoplexes in Methods in Molecular Biology-Vaccine Delivery Technology (Editors.: Pfeifer, B., Hill, A.) (2021) DOI: 10.1007/978-1-0716-0795-4_12
- *equal contributions
- iii. Lothert, K.; Wolff, M.W. Chromatographic purification of viruses: State of the art and current trends in Bioprocess and Analytics Development for Virus-based Advanced Therapeutics and Medicinal Products (ATMPs) (Editors: Gautam, S., Chiramel, A.I., Pach, R.) (2023) DOI: 10.1007/978-3-031-28489-2_7
4. Patent applications
 - i. Priority submission EPÜ, Method for Virus Production, Number: EP20159795, Day of submission: 27.02.2020, Submitted by: Technische Hochschule Mittelhessen, Eberhard-Karls-Universität, Tübingen
 - ii. EP, Method of purifying whole virus particles: Number: EP20186549.0, Day of submission: 17.07.2020, Submitted by: Technische Hochschule Mittelhessen, Copenhagen University Hospital
5. Conference contributions
 - a. Talks
 - i. Marichal-Gallardo, P.; Lothert, K.; Grein, T.A.; Reichl, U.; Czermak, P.; Wolff, M.W. Purification of cell culture-based virus particles by steric exclusion chromatography, ACS 2018, 18.-22.03.2018 New Orleans, USA
 - ii. Lothert, K.; Beyer, F.; Sprick, G.; Czermak, P.; Wolff, M.W. Purification of insect cell culture derived recombinant baculovirus by steric exclusion chromatography for cell therapy application, INSECTA 2018, 5-7.09.2018 Giessen, Germany
 - iii. Wolff, M. W.; Lothert, K.; Eilts, F.; Development of production processes for vaccines and viral vectors, BioSeparations Forum 2020, 1.10.2020, virtual
 - iv. Eilts, F.; Steger, M.; Lothert, K.; Pagallies, F.; Amann, R.; Wolff, M.W.: The impact of purification on the particle integrity of the Orf virus analyzed for an established downstream process,ACHEMA Pulse Kongress 2021, 15.-16.06.2021, online
 - v. Lothert, K.; Pagallies, F.; Eilts, F.; Sivanapillai, A.; Feger, T.; Amann, R.; Wolff, M.W.; Development of a scalable downstream purification process for Parapoxvirus Ovis (ORFV) purification for human and veterinary application, ISPPP 2021, 07.-10.11.2021, Porto, Portugal
 - vi. Eilts, F.; Lothert, K.; Orbay, S.; Pagallies, F.; Amann, R.; Wolff, M.W. Investigations of the salt/PEG-system throughout the steric exclusion chromatography of the Orf virus, PREP Symposium 2022, 15.-18.05.2022, Baltimore, MD, USA
 - vii. Eilts, F.; Lothert, K.; Wolff, M.W. The role of target aggregation throughout the steric exclusion chromatography, BioPro2022 Himmelfahrtstagung, 23.-25.05.2021, Mainz, Germany
 - viii. Lothert, K.; Bagrin, E.; Wolff, M.W. Evaluation of Novel Quantification Approaches for Infectious Viruses, AIChE Annual Meeting 2023 05.-10.11.2023 Orlando, FL, USA.
 - b. Posters
 - i. Lothert, K.; Loewe, D.; Grein, T.A.; Czermak, P.; Wolff, M.W. Purification of cell culture-derived oncolytic measles virus by membrane chromatography, ACS 2018, 18.-22.03.2018 New Orleans, USA
 - ii. Lothert, K.; Beyer, F.; Sprick, G.; Czermak, P.; Wolff, M.W. Steric exclusion chromatography for recombinant baculovirus purification: Model for an affordable, fast and efficient capture platform, 3rd Bioprocessing of Advanced Cellular Therapies Congress 2018, 29-30.05.2018, Frankfurt, Germany
 - iii. Lothert, K.; Beyer, F.; Sprick, G.; Czermak, P.; Wolff, M.W. Steric Exclusion Chromatography for the purification of recombinant baculovirus, Vaccine Technology VII 2018, 17.-22.06.2018 Mont Tremblant, Quebec, Canada
 - iv. Wolff, M.W.; Marichal-Gallardo, P.; Lothert, K.; Fortuna, A.R.; Czermak, P.; Reichl, U. A step towards globally affordable vaccines & gene therapies: Steric exclusion chromatography as a capture platform Recovery of Biological Products XVIII 2018, 7.-12.10.2018 Asheville, North Carolina, USA
 - v. Lothert, K.; Feger, T.; Amann, R.; Wolff, M.W. A fast and scalable purification technique for vaccines and viral vectors: Purification of parapoxvirus particles using steric exclusion chromatography, ISPPP 2018, 04.-07.11.2018, Berlin, Germany
 - vi. Eilts, F.; Harsy, Y.M.J.; Orbay, S.; Lothert, K.; Pagallies, F.; Amann, R.; Wolff, M.W. Charge-dependent purification of nanoparticles by steric exclusion chromatography, BioPro2021 Himmelfahrtstagung, 10.-12.05.2021, online.
 - vii. Lothert, K.; Harsy, Y.; Gröb, T.; Linscheid, Y.; Lee, K.-Z.; Wolff, M.W. Development of cell culture-based production processes for insect viruses to enable targeted insecticide applications BioPro2023 Himmelfahrtstagung, 15.-17.05.2023, Weimar, Germany
 - viii. Lothert, K.; Harsy, Y.; Gröb, T.; Lee, K.-Z.; Wolff, M.W. Development of a Cell Culture-Derived Viral Insecticide to Control the Spread of Drosophila Suzukii, AIChE Annual Meeting 2023 05.-10.11.2023 Orlando, FL, USA.
 - c. Conference proceedings
 - i. Lothert, K.; Loewe, D.; Grein, T.A.; Czermak, P.; Wolff, M.W. Purification of cell culture-derived oncolytic measles virus by membrane chromatography (2018) Abstracts of Papers of the American Chemical Society 255
 - ii. Marichal-Gallardo, P.; Lothert, K.; Grein, T.A.; Reichl, U.; Czermak, P.; Wolff, M.W. Purification of cell culture-based virus particles by steric exclusion chromatography (2018) Abstracts of Papers of the American Chemical Society 255
 - iii. Lothert, K.; Harsy, Y.; Gröb, T.; Lee, K.-Z.; Wolff, M.W. Development of a Cell Culture-Derived Viral Insecticide to Control the Spread of Drosophila Suzukii, AIChE Annual Meeting, Conference Proceedings, (2023), 2023-November.
 - iv. Lothert, K.; Bagrin, E.; Wolff, M.W. Evaluation of Novel Quantification Approaches for Infectious Viruses, AIChE Annual Meeting, Conference Proceedings, (2023), 2023-November

Projects

N.A.

Memberships

N.A.

Other Relevant Information

N.A.