

Curriculum Vitae of Prof. Dr. Li Deng

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Personal information

Date of Birth: October, 1980

Family status: Married, two children

Education

- 10/2008 PhD in Microbiology
School of Biological Sciences, University of Bristol, UK
- 10/2004 Master of Science in Environmental Sciences
School of Life Sciences, University of Nottingham, UK
- 01/2003 B. Eng. in Environmental Engineering
Tsinghua University, China

Current position(s)

- Since 05/2023 Director, Central Institute of Disease Prevention University of Munich,
Germany
- Since 03/2022 Chair Professor (W3) of Microbial Disease Prevention, School of Life
Sciences, Technical University of Munich, Germany
Joint Professor of Helmholtz Centre Munich and the Technical University of
Munich
- Since 03/2017 HMGU Young Investigator Group Leader
Institute of Virology, Helmholtz Centre Munich, Germany
TUM Junior Fellow
School of Medicine, Technical University of Munich, Germany
- Since 09/2016 Emmy Noether Group Leader
Institute of Virology, Helmholtz Centre Munich, Germany

Previous positions

- 12/2011 – 07/2015 Senior Postdoc
Institute of Groundwater Ecology, Helmholtz Centre Munich, Germany
- 10/2008 – 11/2011 Postdoctoral Research Associate
Ecology and Evolutionary Biology Department, University of Arizona, USA

Selected fellowships and awards

- 09/2017 – *present* **Board Director** of the European Viral Bioinformatics Centre

Since 03/2023	Award for First-time professorial appointments of excellent women scientists (W2/W3), Helmholtz association, Germany
09/2020 – 08/2024	One of the four Executive Board members of the EU Innovative Training Networks (ITN) “VIROINF”, Marie Skłodowska-Curie Actions, EU
01/2019 – 12/2026	Steering committee member of the SFB/CRC 1371 “Microbiome Signatures – Functional Relevance in the Digestive Tract”, Germany
04/2019	TOP 10 junior scientist of the year , Academics (Die Zeit, research & education, Germany)
09/2018 – 08/2023	ERC starting grant , European Research Council, EU
03/2017 - <i>present</i>	TUM Junior Fellow , Technical University of Munich, Germany
03/2017 – <i>present</i>	HMGU Young Investigator Group Leader , Helmholtz Centre Munich, Germany
09/2016 – <i>present</i>	Emmy Noether Junior Group Leader , German Research Foundation (DFG), Germany
09/2014	International collaborative research award , University of Queensland, Australia
09/2008	Irene Manton Prize , British Phycological Society, UK
09/2007	President award , British Phycological Society, UK
10/2004 – 09/2007	Dorothy Hodgkin Postgraduate Award , research council award, UK

Supervision of graduate students and postdoctoral fellows

09/2016 – <i>present</i>	Main supervisor of 8 postdocs (5 are ongoing)/ 13 PhD and MD students (11 are on-going)/ multiple master and bachelor students Technical University of Munich, Germany
08/2008 – 09/2011	Co-Supervisor for 4 PhD students, 2 bachelor and 2 master students, University of Arizona, USA

Selected teaching activities (if applicable)

Since 09/2016	Lecturer in the lecture serial “Molecular and Medical Virology (I & II)”, two semesters/year, School of Medicine, Technical University of Munich, Germany
Since 09/2016	3-weeks-block-practical courses “Molecular and Medical Virology”, two semesters/year, School of Medicine, Technical University of Munich, Germany
11/2012 – 06/2015	Lecturer in the lecture serial “Microbiology of Groundwater Ecosystems”, School of Life Sciences, Technical University of Munich, Germany

Invited lectures (Selected)

2023	Academy of the German Centre for Infectious Research
2023	Annual Meeting of the German Centre for Lung Research
2022	EuroScience Open Forum, Current Research Trends towards solving Antimicrobial Resistance Session
2022	Annual Meeting of the International Union of Microbiological Societies (Plenary)
2022	2nd German Phage Symposium (Plenary)
2022	DZIF Symposium ‘Bacteriophages in Science and Clinical Use’

2022	Annual Meeting of the German Virology Association (Plenary)
2022	German Biobank Node, Germany, Workshop of Microbiome Research and Biobanking, “Virome in Human Microbiome Research”
2019	Military Academic Hospital Berlin, Germany, “Reintroduction of Bakteriophages in today’s medicine space - Phage Meeting Berlin 2019”
2019	Gordon Research Conference, USA, “Applied and Environmental Microbiology” (Keynote)
2018	11th Seeon intestinal Microbiota Conference (Keynote), Seeon, Germany
2017	European Viral Bioinformatics Centre annual meeting (Keynote), Jena, Germany
2011	American Society for Microbiology (ASM) General Meeting (Keynote), USA

Institutional responsibilities (if applicable)

03/2017 – present	Faculty member, Schools of Medicine and Life Sciences, Technical University of Munich, Germany
01/2019 – present	Member of the Institute for Advanced Study (IAS - TUM), Technical University of Munich, Germany
01/2019 – present	Member of Center for Advanced Studies (CAS - LMU), Ludwig Maximilian University of Munich

Elected Academy Memberships and Relevant Role In Scientific Societies/Networks (selected)

2017 – 2023	Elected Board Director, European Viral Bioinformatics Centre, EU
2020 – <i>present</i>	One of the four Executive Board members of the EU Innovative Training Networks (ITN) “VIROINF”, Marie Skłodowska-Curie Actions, EU
2019 – <i>present</i>	One of the five Steering committee members of the SFB/CRC 1371 “Microbiome Signatures, Germany

Reviewing activities (selected)

2022 - 2023	Review Panel member, Research Council of Finland (Cell Panel)
Since 2019	Reviewed grant applications for national research funding agencies of Germany, Belgium, France, UK, USA and Ireland
Since 2020	Editorial Board, journal “Microbial Biotechnology”, UK
<i>Ad hoc</i> reviewer (Selection)	Nature Microbiology, Microbiome, Cell Host and Microbes, ISME Journal, Viruses, Applied and Environmental Microbiology, Environmental Microbiology <i>etc.</i>

Membership of scientific societies (selected)

Since 2019	Principal investigator of German Center for Lung Research (DZL)
Since 2018	Founding member, European Viral Bioinformatics Centre, EU
Since 2017	Principal investigator of German Center for Infection Research (DZIF)

Standards and Consultant

Since 2023 Co-lead the construction of the German National Guideline Personalized Phage Therapy(AWMF S2K Guideline), responsible for the Sub-group of “Phage Research”

Since 2022 Scientific advisory board member, German National Expert Network for Phage Therapy, lead the Session of “Phage Production”

Career breaks (if applicable)

02/2019 – 02/2021 75% working-time due to childcare; 25 months in total
09/2016 - 01/2019 50% working-time only due to childcare; 20 months in total
06/2015 - 08/2016 Maternity leave; 14 months in total
03/2012 - 05/2013 Maternity leave; 14 months in total

Acquired third-party funding (selected) (~10 Million € in total and ~7 Million €ongoing (Own Share))

2026 - 2029 GRASP - Global Response Against Superbugs and Pathogens, Marie Skłodowska-Curie Actions, Staff Exchange, EU; my project alone is ~200K€

2025- 2028 Phage-Antimicrobial combination strategies for management of multidrug-resistant *E. coli* and *K. pneumoniae*; Co-PI, 300K € own share; The Joint Programming Initiative on Antimicrobial Resistance Project (JPIAMR).

2024-2027 Effect of *Helicobacter pylori* eradication and microbiome manipulation on colorectal cancer development; 328K €; Sole PI; German Research Foundation (DFG), Germany

2024-2027 Advancing Airway Microbiome Analyses within the DZL: Standardization, Education, and Cutting-Edge Trials on Microbiome Development in Early Childhood; co-PI, 150K € own share; DZL (Germany Center for Lung research)

2023- 2027 Virome and Sustainable Microbiome; Excellent women scientists grant of the President Initiative of the Helmholtz Association; 2.0 Million €; Sole PI; Helmholtz association, Germany

2023-2026 Systematic identification of phage-host cross-talk in airway microbiome and its role in asthma; 275 K €; Sole PI; German Research Foundation (DFG), Germany

2021-2027 DFG Priority Program 2330 – Novel Concepts in Phage Biology, my project is ~ 600K €; German Research Foundation (DFG), Germany

01/2019 – 12/2026 SFB/CRC 1371 “Microbiome Signatures – Functional Relevance in the Digestive Tract”, German Research Foundation (DFG), Germany; my projects alone are ~600K €; PI & one of the five Steering committee members

09/2020 – 08/2024 Innovative Training Networks (ITN) “VIROINF”, Marie Skłodowska-Curie Actions, EU; my project alone is ~250K €; PI & One of the four Executive Board members of the ITN

2020-2022 COVPHA - Interrogating COVID-19, lung microbiota and therapeutic phages to mitigate secondary lung infection and inflammation; 0.9 Million €; Sole PI; BMBF, Germany

2020-2021	COMBAT C19IR: Clinical- and Omic- Based Analysis of Trajectory for COVID-19 Infection and Recovery, one of four CO-PIs, my WPs is ~200K €; BMBF, Germany
01/2019 – 07/2025	ERC starting grant, European Research Council, EU; 1.5 Million € + 0.5 Million € institutional funding; Sole PI
2018-2020	Innovation and Translation fund; PI, 300 K €; Helmholtz Association, Germany
12/2018 – 11/2021	Oilvirome; 250K €; Sole PI; German Research Foundation (DFG), Germany
09/2017-08/2019	Alexander von Humboldt Foundation, Germany; 150K €; Host the Humboldt Postdoc Fellowship for Dr. A. Elbehery, ~200K €; Germany
09/2016 – 12/2024	Emmy Noether; 1.9 Million €; Sole PI; German Research Foundation (DFG), Germany

Top-10 selected Publications

- Thiele Orberg E, Meedt E, Hiergeist A, Xue J, Heinrich P, Ghimire S, Miltiadous O, Lindner S, Schwarz A, Janssen K-P, Herhaus P, Verbeek M, van den Brink MRM, Weber D, Edinger M, Wolff D, Kleigrewe K, Herr W, Bassermann F, Gessner A, **Deng L***, Holler E*, Poeck H*, Bacterial and Bacteriophage Consortia are Associated with Protective Intestinal Immuno-modulatory Meta-bolites in Allogeneic Stem Cell Transplantation Patients, *Nature Cancer*. 2024 (5) 187–208.
- Luo S, Ru J, Khan Mirzaei M, Xue J, Peng X, Ralser A, Hadi JL, Mejias-Luque R, Gerhard M and **Deng L***. *Helicobacter pylori* infection alters gut virome by expanding temperate phages linked to increased risk of colorectal cancer. *Gut*. 2023. gutjnl-2023-330362. (IF: 31.795)
- Luo S, Ru J, Khan Mirzaei M, Xue J, Peng X, Ralser A, Mejias-Luque R, Gerhard M and **Deng L***. Gut virome profiling identifies an association between temperate phages and colorectal cancer promoted by *Helicobacter pylori* infection. *Gut Microbes*. 2023. 15(2): 2257291. (IF: 14.4)
- Ru J, Khan Mirzaei M, Xue J, Peng X and Peng X, and **Deng L***. ViroProfiler: a containerized bioinformatics pipeline for viral metagenomic data analysis. *Gut Microbes*, 2023. 15(1): p. 2192522. doi: 10.1080/19490976.2023.2192522.
- Unterer, M., M.K. Mirzaei, and **Deng L***. Targeted Single-Phage Isolation Reveals Phage-Dependent Heterogeneous Infection Dynamics. *Microbiology Spectrum*, 2023. 0(0): p. e05149-22.
- Tiamani K, Luo S, Schulz S, Xue J, Costa R, Khan Mirzaei M & **Deng L***. The role of virome in the gastrointestinal tract and beyond. *FEMS Microbiology Reviews*, 2022. doi:10.1093/femsre/fuac027
- Khan Mirzaei M, **Deng L***. New technologies for developing phage-based tools to manipulate the human microbiome. *Trends Microbiol*. 2021 May 18:S0966-842X(21)00118-9. doi: 10.1016/j.tim.2021.04.007.
- Unterer M, Khan Mirzaei M, **Deng L***. Gut Phage Database: phage mining in the cave of wonders. *Signal Transduction and Targeted Therapy*. 2021 May 17;6(1):193. doi: 10.1038/s41392-021-00615-2.
- Dzunkova M, Low SJ, Daly JN, **Deng L**, RinkeC, Hugenholtz P. Defining the human gut host-phage network through single-cell viral tagging. *Nature Microbiology*, 2019;4(12):2192-2203. doi: 10.1038/s41564-019-0526-2
- **Deng L**, Ignacio-Espinoza JS, Gregory A, Poulos PT, Weitz JS, Hugenholtz P, Sullivan MB. Viral tagging reveals discrete populations in *Synechococcus* viral genome sequence space, *Nature*, 2014, 513, 242-245. doi: 10.1038/nature13459.

List of Publications since 2014(4 years plus parental leaves; from most recent; *corresponding author)

1. Yang L, Ru J, Guo S, Yang X, Li P, **Deng L***, Wang X*. Research note: The chicken gut virome: Spatiotemporal dynamics and divergent responses to antibiotic versus phytogetic supplementation. ***Poult Sci.*** 2026 Mar;105(3):106373. doi: 10.1016/j.psj.2026.106373. Epub 2026 Jan 3. PMID: 41544440; PMCID: PMC12830181.
2. Wang X, Tian S, Zhang Y, Yang L, Hu D, Wang Z, Yang X, Li S, Wei J, Zhou W, Wang S, **Deng L**, Li F, Hou S, Li P, Ru J. Bacteria and phage consortia modulate cecal SCFA production and host metabolism to enhance feed efficiency in ducks. ***Microbiome.*** 2026 Mar 4. doi: 10.1186/s40168-026-02368-y. Epub ahead of print. PMID: 41782011
3. Yang X, Li P, ..., **Deng L***, Wang X*. Ru J*. Global Characterization of the Avian Gut Virome Reveals Extensive Viral Diversity and Functional Implications, 16 October 2025, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/rs.3.rs-6913311/v1]
4. Huang W, Khan Mirzaei M & **Deng L***. Comparative evaluation of long-term preservation methods for morphologically distinct bacteriophages. ***Microbiol Spectr.*** 2025 Jul;13(7):e0144224. doi: 10.1128/spectrum.01442-24. Epub 2025 Apr 16. PMID: 40237456; PMCID: PMC12211016.
5. Rupp, M., Ferry, T., Khan Mirzaei, M., Alt, V., **Deng, L.**, Walter, N. Bacteriophages for the treatment of musculoskeletal infections – An overview of clinical use, unresolved issues, and the legal framework. ***Orthopadie,*** DOI: 10.1007/s00132-025-04690-z (2025)
6. Walter N, Khan Mirzaei M, **Deng L**, Willy C, Alt V., Rupp M. The Potential of Bacteriophage Therapy as an Alternative Treatment Approach for Antibiotic-Resistant Infections. ***Med Princ Pract*** 26 February 2024; 33 (1): 1–9. <https://doi.org/10.1159/000534717>
7. Ramaboli MC, Ocvirk S, Khan Mirzaei M, Eberhart BL, Valdivia-Garcia M, Metwaly A, Neuhaus K, Barker G, Ru J, Nesengani LT, Mahdi-Joest D, Wilson AS, Joni SK, Layman DC, Zheng J, Mandal R, Chen Q, Perez MR, Fortuin S, Gaunt B, Wishart D, Methé B, Haller D, Li JV, **Deng L**, Swart R, O’Keefe SJD (2024) Diet changes due to urbanization in South Africa are linked to microbiome and metabolome signatures of Westernization and colorectal cancer. ***Nat Commun.*** 2024, 15 (1):3379. doi:10.1038/s41467-024-46265-0
8. Thiele Orberg E, Meedt E, Hiergeist A, Xue J, Heinrich P, Ru J, Ghimire S, Miltiadous O, Lindner S, Schwarz A, Janssen K-P, Herhaus P, Verbeek M, van den Brink MRM, Weber D, Edinger M, Wolff D, Kleigrewe K, Herr W, Bassermann F, Gessner A*, **Deng L***, Holler E*, Poeck H*, Bacterial and Bacteriophage Consortia are Associated with Protective Intestinal Immuno-modulatory Meta-bolites in Allogeneic Stem Cell Transplantation Patients, ***Nature Cancer*** . 2024, Jan 3. doi: 10.1038/s43018-023-00669-x. Epub ahead of print. PMID: 38172339.
9. Wang Z, Peng X, Hülppusch C, Khan Mirzaei M, Reiger M, Traidl-Hoffmann C, **Deng L**, Schloter M. Distinct prophage gene profiles of Staphylococcus aureus strains from atopic dermatitis patients and healthy individuals. ***Microbiol Spectr.*** 2024 Aug 6;12(8):e0091524. doi: 10.1128/spectrum.00915-24. Epub 2024 Jul 16. PMID: 39012113; PMCID: PMC11302291.
10. Kirk D, Costeira R, Visconti A, Khan Mirzaei M, **Deng L**, Valdes AM, C Menni. 2024) Bacteriophages, gut bacteria, and microbial pathways interplay in cardiometabolic health. ***Cell Reports*** . 2024, 43 (2)

11. Walter N, Khan Mirzaei M, **Deng L**, Willy C, Alt V, Rupp M. The potential of bacteriophage therapy as an alternative treatment approach for antibiotic-resistant infections. ***Medical Principles and Practice.*** 2024. 33 (1), 1-9
12. Luo S, Ru J, Khan Mirzaei M, Xue J, Peng X, Ralser A, Hadi JL, Mejías-Luque R, Gerhard M, Deng L. Helicobacter pylori infection alters gut virome by expanding temperate phages linked to increased risk of colorectal cancer. ***Gut.*** 2024 Aug 8;73(9):1592-1595. doi: 10.1136/gutjnl-2023-330362. PMID: 37918887.
13. Luo S, Ru J, Khan Mirzaei M, Xue J, Peng X, Ralser A, Mejías-Luque R, Gerhard M and **Deng L***. Gut virome profiling identifies an association between temperate phages and colorectal cancer promoted by *Helicobacter pylori* infection. ***Gut Microbes.*** 2023. 15(2): 2257291.
14. Ru J, Khan Mirzaei M, Xue J, Peng X and Peng X, and **Deng L***. ViroProfiler: a containerized bioinformatics pipeline for viral metagenomic data analysis. ***Gut Microbes,*** 2023. 15(1): p. 2192522. doi: 10.1080/19490976.2023.2192522.
15. Unterer, M., M.K. Mirzaei, and **Deng L***. Targeted Single-Phage Isolation Reveals Phage-Dependent Heterogeneous Infection Dynamics. ***Microbiol Spectr.,*** 2023. 0(0): p. e05149-22.
16. Ru J, Xue J, Sun J, Cova L and **Deng L***. Unveiling the hidden role of aquatic viruses in hydrocarbon pollution bioremediation. ***J Hazard Mater.*** 2023 Oct 5;459:132299. doi: 10.1016/j.jhazmat.2023.132299. Epub 2023 Aug 15. PMID: 37597386.
17. Ralser A, Dietl A, Jarosch S, Engelsberger V, Wanisch A, Janssen KP, Middelhoff M, Vieth M, Quante M, Haller D, Busch DH, **Deng L**, Mejías-Luque R, Gerhard M. Helicobacter pylori promotes colorectal carcinogenesis by deregulating intestinal immunity and inducing a mucus-degrading microbiota signature. ***Gut.*** 2023 Apr 4:gutjnl-2022-328075. doi: 10.1136/gutjnl-2022-328075.
18. Willy C, Bugert JJ, Classen AY, **Deng L**, Düchting A, Gross J, Hammerl JA, Korf IHE, Kühn C, Lieberknecht-Jouy S, Rohde C, Rupp M, Vehreschild MJGT, Vogeles K, Wienecke S, Witzenthat M, Würstle S, Ziehr H, Moelling K, Broecker F. Phage Therapy in Germany—Update 2023. ***Viruses.*** 2023; 15(2):588. <https://doi.org/10.3390/v15020588>
19. Sun J, Ru J, Ramos-Mucci L, Qi F, Chen Z, Chen S, Cribbs AP, **Deng L*** and Wang X*. DeepSmirUD: Prediction of Regulatory Effects on microRNA Expression Mediated by Small Molecules Using Deep Learning. ***International Journal of Molecular Sciences.*** 2023; 24(3):1878. <https://doi.org/10.3390/ijms24031878>
20. Bauer A, Pachi E, Hellmuth JC, Kneidinger N, Heydarian M, Frankenberger M, Stubbe HC, Ryffel B, Petrera A, Hauck SM, Behr J, Kaiser R, Scherer C, **Deng L**, Teupser D, Ahmidi N, Muenchhoff M, Schubert B, Hilgendorff A. Proteomics reveals antiviral host response and NETosis during acute COVID-19 in high-risk patients. ***Biochim Biophys Acta Mol Basis Dis.*** 2022. Nov 1;1869(2):166592. doi: 10.1016/j.bbadis.2022.166592. Epub ahead of print. PMID: 36328146; PMCID: PMC9622026. (IF: 6.2)
21. Elbehery, A. H., & **Deng, L.** Insights into the global freshwater virome. ***Frontiers in Microbiology.*** 2022. 13. doi: 10.3389/fmicb.2022.953500
22. Chen, W., Ma, J., Jiang, Y., **Deng, L.**, Lv, N., Gao, J., Cheng, J., Liang, J. B., Wang, Y., Lan, T., Liao, X., & Mi, J. Selective Maternal Seeding and Rearing Environment From

- Birth to Weaning Shape the Developing Piglet Gut Microbiome. *Frontiers in Microbiology*. 2022, 13. doi: 10.3389/fmicb.2022.795101
23. Wu, R., Cao, Z., Jiang, Y., Chen, W., Sun, Y., Li, Q., . . . Ma, J. (2022). Early life dynamics of ARG and MGE associated with intestinal Virome in neonatal piglets. *Veterinary Microbiology*, 109575. doi:https://doi.org/10.1016/j.vetmic.2022.109575
 24. Tiamani K, Luo S, Schulz S, Xue J, Costa R, Khan Mirzaei M & **Deng L***. The role of virome in the gastrointestinal tract and beyond. *FEMS Microbiology Reviews*, 2022. doi:10.1093/femsre/fuac027
 25. Smith SE, Huang W, Tiamani K, Unterer M, Khan Mirzaei M, **Deng L***. Emerging technologies in the study of the virome. *Current Opinion in Virology* 2022. 54:101231. doi: 10.1016/j.coviro.2022.101231. Epub 2022 May 25. PMID: 35643020. (IF 7.09)
 26. Entfellner E., Li R., Jiang Y., Ru J., Blom J., **Deng L.**, Kurmayer R. (2022). Toxic/bioactive peptide synthesis genes rearranged by insertion sequence elements among the bloom-forming cyanobacteria Planktothrix. *Front Microbiol* doi:10.3389/fmicb.2022.901762
 27. Ma T, Ru J, Xue J, Schulz S, Mirzaei MK, Janssen K-P, Quante M, **Deng L***. Differences in Gut Virome Related to Barrett Esophagus and Esophageal Adenocarcinoma. *Microorganisms*. 2021; 9(8):1701.
 28. Huang H, Jiang Y, Zhao J, Li S, Schulz S, **Deng L***. BTEX biodegradation is linked to bacterial community assembly patterns in contaminated groundwater ecosystem. *Journal of Hazardous Materials*.. 2021 May 24;419:126205. doi: 10.1016/j.jhazmat.2021.126205. Epub ahead of print. PMID: 34216964.
 29. Khan Mirzaei M, **Deng L***. New technologies for developing phage-based tools to manipulate the human microbiome. *Trends Microbiol*. 2021 May 18:S0966-842X(21)00118-9. doi: 10.1016/j.tim.2021.04.007. Epub ahead of print. PMID: 34016512.
 30. Unterer M, Khan Mirzaei M, **Deng L***. Gut Phage Database: *Signal Transduction and Targeted Therapy*. 2021 May 17;6(1):193. doi: 10.1038/s41392-021-00615-2. PMID: 34001868; PMCID: PMC8128913.
 31. Goettsch W, Beerenwinkel N, **Deng L**, . . . , Marz M*. ITN-VIROINF: Understanding (Harmful) Virus-Host Interactions by Linking Virology and Bioinformatics. *Viruses*. 2021 Apr 27;13(5):766. doi: 10.3390/v13050766. PMID: 33925452; PMCID: PMC8145447.
 32. Khan Mirzaei M, Xue J, Costa R, Ru J, Schulz S, Taranu ZE, **Deng L***. Challenges of Studying the Human Virome - Relevant Emerging Technologies. *Trends Microbiol*. 2021 Feb;29(2):171-181. doi: 10.1016/j.tim.2020.05.021. Epub 2020 Jul 1. PMID: 32622559.
 33. Khan Mirzaei M, **Deng L***. Sustainable Microbiome: a symphony orchestrated by synthetic phages. *Microb Biotechnol*. 2021 Jan;14(1):45-50. doi: 10.1111/1751-7915.13697. Epub 2020 Nov 10. PMID: 33171009; PMCID: PMC7888444.
 34. N Walter, **L Deng**, C Brochhausen, V Alt and M Rupp. Treatment of bone and prosthesis infections with bacteriophages: a systematic review. *Der Orthopade*. 2021, 51 (2), 138
 35. Jung S, Jacobs KFK, Shein M, Schütz AK, Mohr F, Stadler H, Stadler D, Lucko AM, Altstetter SM, Wilsch F, **Deng L**, Protzer U*. Efficient and reproducible depletion of hepatitis B virus from plasma derived extracellular vesicles. *J Extracell Vesicles*. 2020 Dec;10(2):e12040. doi: 10.1002/jev2.12040. Epub 2020 Dec 22. PMID: 33363711; PMCID: PMC7754750.

36. Kaletta J, Pickl C, Griebler C, Klingl A, Kurmayer R and **Deng L***. A rigorous assessment and comparison of enumeration methods for environmental viruses. (2020) **Scientific Reports** 10(1): 1-12.
37. Mirzaei MK, Khan AK, Ghosh P, Taranu ZE, Taguer M, Ru J, Chowdhury R, Kabir MD, **Deng L**, Mondal D and Maurice CF. Bacteriophages Isolated from Stunted Children Can Regulate Gut Bacterial Communities in an Age-Specific Manner. (2020) **Cell Host & Microbe**, 27 (2): 199-212.
38. Kurmayer R, Entfellner E, Weisse T, Offterdinger M, Rentmeister A, **Deng L**: Chemically labeled toxins or bioactive peptides show a heterogeneous intracellular distribution and low spatial overlap with autofluorescence in bloom-forming cyanobacteria. (2020) **Scientific Reports**, 10(1):2781.
39. Ma T, Jiang J, Elbehery AHA, Blank S, Kurmayer R, **Deng L***. Resilience of planktonic bacterial community structure in response to short-term weather deterioration during the growing season in an alpine lake. (2020) **Hydrobiologia**, 847: 535–548
40. Dzunkova M, Low SJ, Daly JN, **Deng L**, Rinke C, Hugenholz P. Defining the human gut host-phage network through single-cell viral tagging. (2019) **Nature Microbiology**, 4(12):2192-2203.
41. Jiang Y, Huang H, Ma T, Ru J, Blank S, Kurmayer R, **Deng L***. Temperature Response of Planktonic Microbiota in Remote Alpine Lakes. (2019). **Frontiers in Microbiology** 10:1714
42. Jiang Y, ..., **Deng L**, Li X, Using nano-attapulgitic clay compounded hydrophilic urethane foams (AT/HUFs) as biofilm support enhances oil-refinery wastewater treatment in a biofilm membrane bioreactor. (2019) **Science of The Total Environment**, 646: 606-61
43. Ibrahim B, McMahon DP, Hufsky F, Beer M, Deng L, Le Mercier P, Palmarini M, Thiel V, Marz M. A new era of virus bioinformatics. (2018) **Virus Research** 251: 86-90.
44. Simon LM, Karg S, Westermann A J, Engel M, Elbehery AHA, Hense B, Heinig M, **Deng L**, Theis F J. MetaMap: An atlas of metatranscriptomic reads in human disease-related RNA-seq data. (2018) **GigaScience** giy070, doi.org:10.1093/gigascience/giy070
45. Elbehery AHA, Feichtmayer J, Singh D, Griebler C & **Deng L***. The Human Virome Protein Cluster Database (HVPC): A Human Viral Metagenomic Database for Diversity and Function Annotation. (2018). **Frontiers in Microbiology** 9, doi:10.3389/fmicb.2018.01110
46. Hufsky F, Ibrahim B, Beer M, **Deng L**, Le Mercier P, McMahon D, Palmarini M, Thiel V and Marz M: Virologists - heroes need weapons. (2018). **Plos Pathogens**, 14(2): e1006771. <https://doi.org/10.1371/journal.ppat.1006771>
47. Feichtmayer J, Deng L & Griebler, C. (2017). Antagonistic Microbial Interactions: Contributions and Potential Applications for Controlling Pathogens in the Aquatic Systems. **Frontiers in Microbiology** 8, doi:10.3389/fmicb.2017.02192
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