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Using cryo-EM methods to uncover structure and function of bacteriophages

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Citation

Ouyang, R. (2023, December 5). *Using cryo-EM methods to uncover structure and function of bacteriophages*. Retrieved from <https://hdl.handle.net/1887/3666064>

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Note: To cite this publication please use the final published version (if applicable).

Publications

Ouyang, R., Costa, A. R., Cassidy, C. K., Otwinowska, A., Williams, V. C., Latka, A., ...
& Briegel, A. (2022). High-resolution reconstruction of a Jumbo-bacteriophage
infecting capsulated bacteria using hyperbranched tail fibers. *Nature Communications*,
13(1), 7241; doi: <https://doi.org/10.1038/s41467-022-34972-5>

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Curriculum Vitae

Ruochen Ouyang was born on 10 May 1995 in Lanzhou, the capital city of Gansu province in northwest China. From 2013 to 2017, he studied at the School of Physical Science and Technology in Lanzhou University. In 2017, he obtained a bachelor's degree in physics and got a recommendation to enter Xi'an Jiaotong University as a direct-PhD candidate (long academic system).

From 2017 to 2019, he studied in the MOE Key Laboratory for Nonequilibrium Synthesis and Modulation of Condensed Matter at the School of Physics in Xi'an Jiaotong University, and was supervised by Prof. Shengli Zhang and Prof. Lei Zhang. During this period, he learned some scientific research skills including the preparation of frozen samples, basic cryo-EM operations, and utilization of scientific software to reconstruct proteins by single-particle analysis (SPA) and cryo-electron tomography (Cryo-ET) methodologies.

In 2019, Ruochen Ouyang was selected and joined the Innovative Talent Joint Training Program between Xi'an Jiaotong University and Leiden University, Netherlands. After obtaining funding from China Scholarship Council (CSC), he began his study in the Institute of Biology Leiden (IBL) at Leiden University under the supervision of Prof. Ariane Briegel, as a joint training PhD candidate.

This thesis covers the work of the Ph.D. research during his study at Leiden University.