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## CRISPR/Cas9 and targeted cancer therapy

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DOI:  
[10.33612/diss.99103461](https://doi.org/10.33612/diss.99103461)

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*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2019

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*  
Liu, B. (2019). *CRISPR/Cas9 and targeted cancer therapy*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.99103461>

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## **Appendices**

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*APPENDICES*

## Acknowledgements

Today is exactly the same day when I came to Groningen four years ago, time flies. Full of memorable experiences are far beyond words. This moment I feel grateful to all of the people I met in Groningen.

First and foremost I would like to express my sincere gratitude to my supervisor Prof. dr. H. J. Haisma. Hidde, I will never forget it's you who gives me the most support, guidance, motivation, and trust in my PhD. I don't know how many times I directly went to your office to ask questions, every time you stopped working in hand to solve my problem with patience. The start of my PhD project was not easy, your continuous encouragement helped my project move forward. Your ability to find positive aspects from the questions and challenges inspired me for now and for my future life and career.

I would like to thank my second supervisor Prof. dr. F.J. Dekker. Frank, I will remember the several meetings, formal or informal talks with you. You are willing to help people. You teach me "focused" and "work efficiently". I realized this is such important for research. I will definitely keep focused and try my best to work efficiently for my future study.

I would also like to thank the members of reading committee, Prof. M. Schmidt, Prof. V.W. van Beusechem, and Prof. F. Fojjer for reading and evaluating my thesis.

Special thanks to my most closed colleagues, **Olivia, Siwei, and Ali**. **Olivia**, I am very happy for being office mate with you for my completed PhD. You are kind and willing to help. I wish you happy every day! **Siwei**, I feel lucky to be working together with you. You are organized and smart. I wish you have a good future. **Ali**, thanks for your contribution to our project. You are self-disciplined, hardworking and organized. Also, my former office mate **Maria-Eleni**, thanks for bringing a lot of fun to me at the beginning of my PhD, those great moments will live in my memory. The former colleagues, **Nick, Niek, Hanah, and Thea**, I wish you all good future.

## APPENDICES

Many thanks to the master students who came and left, **Anouk, Dominik, Manon and Deng**. I hope you did learn something from me, but definitely I learnt quite a lot from you guys.

Big thanks to our technicians, managers, and secretaries; **Petra** and **Rita**, thank you for organizing our lab and ordering materials. I truly appreciate your selfless contributions to our group. I wish all the best to you and your family. **Robbert**, you are an expert in protein as well as in making people happy. I remember many happy moments with you. **Janine**, thank you for helping me everything when I came to Groningen. I knew you are a very kind person when I have the first talk with you. **Yvonne**, thank you for the documentary work. A lot of thanks to all of the colleagues in our department, who came and left, **Abel, Alex, Andreas, Christel, Dan, Eleonora, Fangyuan, Fabiola, Faizan, Guangcai, Gea, Hegar, Ingy, Jan, Jane, Joko, Laura, Linda, Lieuwa, Marie, Magda, Michele, Putri, Sabry, Saif, Saravanan, Roberta, Siqi, Tijie, Xinyu, Yafeng, Yani, and Zainal**.

I would like to thank **Martijn** and **Deng** for being my paranymphs. **Martijn**, I enjoyed playing Pingpong with you. You will definitely be the champion after I leave. **Deng**, thanks a lot for helping me with experiments in my last year of PhD. You are ambitious and hardworking. I believe you will have a big success in your coming PhD. I am grateful that I will complete my PhD defense with your company.

Of course, my deep gratitude to all Chinese friends I met in Groningen, we are a real family. **Hao**, thank you for taking me to travel many beautiful places in Europe, you are the best guide for my trips. **Yizhou**, you know everything. I appreciate your daily living skills; you did help me a lot for buying the best train, plane tickets, and so on. **Shanshan**, I miss the “红烧肉” you made. May I eat it once more before I leave Groningen? **Haigen**, can you tell me how you can talk about anything in a scientific way? Please teach me. **Kenj**, you don't owe me money, I am sure. **Yana**, do you have a boyfriend now? **Baojie** and **Jielin**, you are all excellent people in both life and science. **Chao**, I think you are the best guy in drinking wine. **Qian, Shipeng, Wenjia, Yu, Jingyao, Xiaoxiang and Daozheng**, I enjoyed the talk with you during and after lunch with coffee in ERIBA.

**Chengtao, Chao Wang, Huala, Kai Gao, Mingming Shi, Suriguga, Wenxuan, Xiaodong, Yuanyuan Wang, Yang Zhang, Yuzhen, and Yehan**, I feel lucky to know you!

I would like to give my sincerely gratitude to **Groningen**-a small city but full of love, which is the second longest place I have ever lived, and the place being remembered forever.

My sincere thanks to my cat "**Mengmeng**", thank you for your companionship with **Lin** when I was working in the lab after working time. You gave us the greatest happiness!

Last but foremost, my deepest gratitude to my father, mother and brother. Thank you for your trust and endless support no matter when and where. My thanks to the most important person –my wife **Lin**, since everything is better with you, and I don't know why! Being with you, I believe every adventure will be a beautiful memory.

Bin Liu

September 2019

Groningen

*APPENDICES*

**List of Publications**

1. **Liu, B.**; Saber, A.; Haisma, H.J. CRISPR/Cas9: a powerful tool for identification of new targets for cancer treatment. *Drug Discov. Today* 2019 Apr;24(4):955-970.
2. Bin Liu,\*; Siwei Chen,\*; Anouk La Rose, Deng Chen, Dominik Kiemel, Manuel Goncalves, Dekker FJ, Haisma HJ. Inhibition of Histone deacetylase 1 (HDAC1) and HDAC2 enhances CRISPR/Cas9-mediated gene editing. preprint in **BioRxiv** doi: <http://dx.doi.org/10.1101/670554> (revision in **Nucleic Acids Research**)
3. **Liu, B.**; Song, S.; Setroikromo, R.; Chen, S.; Hu, W.; Chen, D.; van der Wekken, A.J.; Melgert, B.N.; Timens, W.; van den Berg, A.; et al. CX Chemokine Receptor 7 Contributes to Survival of KRAS-Mutant Non-Small Cell Lung Cancer upon Loss of Epidermal Growth Factor Receptor. *Cancers (Basel)*. 2019 Mar 30;11(4).
4. Zhang, B.; **Liu, B.**; Chen, D.; Setroikromo, R.; Haisma, H.J.; Quax, W.J. Histone Deacetylase Inhibitors Sensitize TRAIL-Induced Apoptosis in Colon Cancer Cells. *Cancers (Basel)*. 2019, 11, 645.
5. Saber, A.; **Liu, B.**; Ebrahimi, P.; Haisma, H.J. CRISPR/Cas9 for overcoming drug resistance in solid tumors. *DARU J. Pharm. Sci.* 2019. [Epub ahead of print]
6. **Bin Liu**, Olivia Adaly Diaz Arguello<sup>‡</sup>, Deng Chen<sup>‡</sup>, Siwei Chen, Ali Saber, Hidde J. Haisma\* CRISPR-mediated ablation of overexpressed EGFR in combination with sunitinib significantly suppresses renal cell carcinoma proliferation. 2019 (under review)
7. **Bin Liu**, Deng Chen, Saber, A, Haisma HJ. Transcriptional activation of cyclin D1 via HER2/HER3 contributes to cell survival and tyrosine kinase inhibitor resistance in non-small cell lung carcinoma. 2019 (under review)



8. Shanshan Song, **Bin Liu**, Hidde J. Haisma, Reinoud Gosens, Gerrit Poelarends, Barbro Melgert. DDT contributes to lung epithelial regeneration via CXCR7. 2019 (in submitting)
9. **Bin Liu**, Siwei Chen, et al. A High-Throughput Platform to Identify Small Molecule Inhibitors and enhancers of CRISPR/Cas9. 2019 (in preparing)
10. **Bin Liu**, Deng Chen, et al. EGF is a ligand of CX Chemokine Receptor 7. (in preparing)

#### **Before PhD study**

11. **Liu, B.**; Zhou, L.; Wang, Q.; Li, K. A mutation-sensitive switch assay to detect five clinically significant epidermal growth factor receptor mutations. *Genet. Test. Mol. Biomarkers* **2015**, *19*, 316–23.
12. Sun, A.; Pu, W.; Zhou, C.; Zhang, R.; **Liu, B.**; Pan, Y.; Zhang, J.; Li, P.; Lil, K. A Nanoscale Mutation-Sensitive On/Off Switch Based Assays for the Detection of Hepatitis B Virus Lamivudine-Resistant Mutations. *J. Nanosci. Nanotechnol.* **2015**, *15*, 3939–43.
13. **Liu, B.**; Xu, H.; Miao, J.; Zhang, A.; Kou, X.; Li, W.; Zhou, L.; Xie, H.-G.; Sirois, P.; Li, K. CRISPR/Cas: A Faster and More Efficient Gene Editing System. *J. Nanosci. Nanotechnol.* **2015**, *15*, 1946–59.

#### **Book Chapter**

Gene Editing, responsible for the CRISPR/Cas9 gene editing chapter (published by People's Health Publishing House). ISBN-10: 7117216743

**Conferences**

1. Symposium human genome editing ( 2015)
2. Netherlands Society of Gene and Cell Therapy ( 2016)
3. European Society of Gene and Cell Therapy (2016)
4. Netherlands Society of Gene and Cell Therapy (2017)
5. Netherlands Society of Gene and Cell Therapy (2018)
6. Netherlands Society of Gene and Cell Therapy (2019)
7. The 2019 Lectures in Biology and Chemistry: Genome Editing by Foundation for Research and Technology – Hellas, Heraklion, Crete, Greece (2019, financial support)

## *About the Author*

### **About the author**

**Bin Liu** was born on June 6, 1989, in Jiangsu, China. In October 2015, he moved to University of Groningen to pursue his PhD in the Department of Chemical and Pharmaceutical Biology under the supervision of Prof. H.J. (Hidde) Haisma. His doctoral research focuses on CRISPR/Cas9 and its application in cancer research and therapy, especially in cancer molecular therapy based on adenovirus, CRISPR/Cas9, and targeted drugs. Before that, he studied Medicine in Soochow University in his home province. At that time, he knew and was becoming interested in CRISPR/Cas9. He is a member of Dutch Society of Gene and Cell Therapy.