

HONGXUAN LI

Email: lihongxuan@mail.bnu.edu.cn | +86 13521362237 | www.hongxuanli.com

EDUCATION

Nanjing University (NJU) China
Master of Science in Physical Geography, School of Geography and Ocean Science Sep 2024 – Jul 2027 (Expected)
• Field of research: Geomorphology, Surface Processes

Beijing Normal University (BNU) China
Bachelor of Science (B.S.) in Geography, Faculty of Arts and Sciences Sep 2020 – Jul 2024 (Expected)
• Cumulative GPA: 84.86/100 (3.5/4)

University of California, Berkeley (UC Berkeley) United States
Summer Session, Earth and Planetary Science Jul 2023 – Aug 2023
• Coursework: Environmental Earth Sciences (A-, Instructor: Dr. Noah Randolph-Flagg)

RESEARCH INTERESTS

Evolution of Earth's Surface & Geomorphology

The powerful and intricate atmospheric and deep-Earth processes have created the stunning landscape that we see today. However, the forces are so complex that they can only be deeply understood through careful study of the evidence that it has left behind. In my upcoming research, I aspire to unveil the hidden secrets concealed within the Earth's historical records, unravel the mysteries of how earth's surface has changed over time, and foster a deep appreciation for the awe-inspiring beauty and formidable power of nature.

PUBLICATIONS

[1] Qi Su*, Xianyan Wang, Daoyang Yuan, Hong Xie, **Hongxuan Li***, Xilei Huang. 2023. Fluvial entrenchment of the Gonghe Basin and integration of the upper Yellow River - Evidence from the cosmogenically dated geomorphic surfaces. *Geomorphology*, 429: 108654. <https://doi.org/10.1016/j.geomorph.2023.108654>

*: **Contributed equally to this work.**

[2] Ze Ren, Shudan Ye, **Hongxuan Li**, Xilei Huang, Luyao Chen, Shengkui Cao, Tao Chen. 2023. Biological Interactions and Environmental Influences Shift Microeukaryotes in Permafrost Active Layer Soil Across the Qinghai-Tibet Plateau. *Microbial Ecology*. <https://doi.org/10.1007/s00248-023-02280-0>

[3] Ze Ren, Shudan Ye, **Hongxuan Li**, Xilei Huang, Luyao Chen. 2023. Differentiation of cognate bacterial communities in thermokarst landscapes: implications for ecological consequences of permafrost degradation. *Biogeosciences*. <https://bg.copernicus.org/articles/20/4241/2023/>

RESEARCH EXPERIENCE

The State Key Laboratory of Earth Surface Processes and Resource Ecology (ESPRE) of BNU China
Research Assistant, Optically Stimulated Luminescence (OSL) Laboratory Jul 2021 – Aug 2021
Program: Comprehensive Scientific Expedition to the Qinghai-Tibet Plateau and the National Natural Science Foundation of China.
Advisors: Prof. Ping Yan (Faculty of Geographical Science, BNU)

• Conducted OSL experiments, mainly for sample processing.

BNU Undergraduate Research Program China
Team Leader Jun 2022 – Jun 2023
Program: Fluvial entrenchment of the Gonghe Basin and integration of the upper Yellow River.
Advisors: Dr. Qi Su (Department of Geographic Science, Faculty of Arts and Sciences, BNU)

- Calculated the cosmogenic burial ages of two abandoned geomorphic surfaces within the Gonghe Basin, including the abandoned Gahaitan channel, which connected Gonghe and Guide Basins, and the Third Tala surface, the highest Yellow River terrace in the Gonghe Basin. The result indicated that the modern Yellow River's emergence time in the Gonghe Basin is believed to be between ~0.76-1.17 Ma.
- Based on the cosmogenic burial age calculations, further scrutinized relevant literature to reconstruct a detailed geomorphological evolution model for the upper Yellow River.
- Presided over the writing of the application form and scientific report and conducted the thesis defense.
- Co-first author of published paper [1] under the Publications section.

- Awarded as the 2022 Outstanding Project in the Department of Geography (Top 2 out of 8 projects).

BNU Undergraduate Research Program

China

Participant

Jun 2023 – Jun 2024 (Expected)

Program: A study on diachronism of the broad geomorphic surface's formation, taking the Gonghe Basin as an example.

Advisors: Dr. Qi Su (Department of Geographic Science, Faculty of Arts and Sciences, BNU)

- Sampled at the front and back edges of a broad terrace respectively to investigate whether there is a span time. If the diachronism exists, scientists must sample at the front edge when defining the formation time of terraces in the future. If it does not exist, then the sampling location is not important.
- Completed the project's application form.
- Working hard at the thesis currently.

BNU Undergraduate Research Program

China

Participant

Jun 2022 – Jun 2023

Program: Microbial driven carbon cycles in permafrost soils across the Qinghai-Tibet Plateau.

Advisors: Dr. Ze Ren (Nanjing Institute of Geography & Limnology, Chinese Academy of Sciences)

- Conducted geography analyses of two academic papers, participated in the writing of the introduction sections, and completed the project's application form and scientific report.
- Utilized ArcGIS, Adobe AI, and R to analyze data and visualize results for two papers.
- Published paper [2] and [3] listed in the Publications section.

COURSEWORK HIGHLIGHT

Geological Basis and Geomorphology (95); Field Practice for Physical Geography (94); Geographical Information System (94); Principle and Practice of Spatial Database (96); Remote Sensing Principles and Interpretation (92)

HONORS & SCHOLARSHIPS

Third-Class BNU Scholarship (2022)

Excellent Student Cadre of BNU (2022)

BNU Social Work Award (2021)

Third-Class BNU Huitong College Scholarship (2021, 2022, 2023)

EXTRACURRICULAR ACTIVITIES & INTERESTS

Volunteer Teacher, Summer Teaching Program in Liupanshui City, Guizhou Province, China Jul 2021

Chairperson, Research Institution of the Huitong College, BNU Jun 2021 – Jun 2023

Commissioner for Culture and Sports, Class of 2024, Geography Program, BNU Sep 2020 – Jun 2021

Basketball Team Player, champion, Huitong College Basketball Match, BNU Oct 2022 – Apr 2023

SKILLS

Programming: ArcGIS, ENVI, MATLAB, Adobe AI, NoteExpress, PostgreSQL, SPSS, C, R

Languages: English (Proficient, TOEFL iBT: 91, CET-6: 493), Chinese (Mandarin, Native)