



香港城市大學  
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## Lend new eyes to students – observing everyday lives with long distance microscope (LDM) <br>(借你一雙慧眼 – 透過長距顯微鏡看日常生活)

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**Principal Investigator:** Dr Xinrui NIU

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### **Abstract:**

More than 300 years ago, Robert Hooke revealed the structure of cell with a hand-crafted, leather and gold-tooled microscope. The study was not only a big step in microscopic history but also a milestone for the development of modern science and engineering research. From then on, people are able to “see” the world with different magnification, and more importantly, from an unprecedented perspective. Inspired by Hooke’s story, this project proposes a lab modulus through which the students are able to explore their everyday lives from a new point of view with the help of a state-of-the-art optical instrument long distance microscope (LDM).

Combining both high magnification and long observing distance, LDM is top-notch instrument for capturing dynamical movement and process. It has been successfully utilized in scientific studies in mechanical engineering, materials science, biology, physics and many other areas. This project will introduce LDM to undergraduate students. The goal is NOT to teach students optic knowledge, but rather to lend the students “new eyes” to explore their surrounding world with self-motivated ideas and methods through open-ended group projects.

The outputs are not only stunning photos/videos, but also students’ enriched mind, self-teaching spirit, curiosity and confidence to discovery the world.