

Xia Lab on Sirtuin Biology and Cancer Studies

School of Biomedical Engineering

• About the Lab •

The Xia lab was established since early 2009 and focused on the function of sirtuin proteins, a family of key regulatory molecules that influence aging and metabolism. We work on lung cancer with close collaboration with Shanghai Chest Hospital and have access to clinical materials and information. Our lab is located in the biology platform on the 3rd floor of Med-X Research Institute (Xuhui Campus), and carries out routine cell, molecular and animal studies on disease mechanisms. The lab has also access to instruments from the University Core Facilities and State Key Lab's equipment. We have discovered the novel oncogenic function of Sirt6 gene in cancer, and identified novel Sirt3-activating small molecule that has anti-cancer, anti-inflammatory functions. We also uncovered sirtuin-dependent and independent signaling pathways important for cancer progression.

• About the Team •

Weiliang Xia, Ph.D., Professor.

Research Area: Molecular mechanisms of cancer progression and cancer therapy by using multidisciplinary approaches; brain ischemia protection and tissue repair; functional studies on Sirtuin family proteins

Dr. Xia obtained his doctoral degree from the University of Hong Kong in 2006, with predoctoral training at the Rockefeller University, followed by postdoctoral fellowship at University of California, San Francisco from 2007 to 2008. Dr. Xia has published 69 papers or book chapters since 2005, which have been cited over 2100 times. He has been awarded the Rising Star Prize by Shanghai Science and Technology Commission, and is funded by National Natural Science Foundation of China and Ministry of Science and Technology.

• Research Fields •

lung cancer progression and therapy

Participate in graduate students' project and learn the basics. Work on lung cancer target genes and regulation, etc. Independent research project is also possible.

- Exosome function lung cancer resistance
- Sirtuin regulation in squamous lung cancer

• Responsibility •

The student is expected to participate in journal clubs, lab meetings and complete the project by submitting a report at the end of the program.

• Eligibility •

- In principle, we recruit junior and senior students
- Hold at least a 2.5 GPA on a 4.0 scale
- Students of non-English speaking countries must provide English language proficiency certificate, IELTS no less than 6.0, and TOEFL no less than 90 points. If you are in the college for English teaching programs, please provide relevant certificates
- Have at least one prior research experience
- Responsible, and teamwork spirit

• Additional Financial Support •

N/A

• Contact •

Person in Charge: Prof. Weiliang Xia

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