

School of Life Sciences and Biotechnology

<http://life.sjtu.edu.cn/english/>

I . Introduction to Disciplines and Main Research Fields

The School of Life Sciences and Biotechnology (SLSB) of Shanghai Jiao Tong University (SJTU) was jointly founded by SJTU and the Chinese Academy of Sciences (Shanghai Branch) in February 1997. The disciplines in the doctor program of Biology in SLSB include Biochemistry and Molecular Biology, Genetics, Microbiology, Developmental Biology, Cell Biology, Bioinformatics, Bio-engineering, etc. Our school trains undergraduates in three disciplines (Biological, Biotechnology, and Bio-engineering) and one cross-discipline, Bioinformatics. We also provide a master program of Bioengineering project as well as a post-doctoral program of Biology. Additionally, the SLSB has two state personnel training bases for Life Sciences & Biotechnology and Biological Science, two Education Ministry special majors: Biotechnology and Bioengineering, and a Municipal Life Science Experimental Teaching Demonstration Center. Currently, there are two National key disciplines and three Shanghai key disciplines in our school. The disciplines, such as Biology and Biochemistry, Molecular Biology and Genetics, Microbiology, and Animal and Plant Science, have entered top 1% in ESI international rankings.

Summary of Fields of Study and Primary Domain of Research in SLSB

Discipline	Domain of Research
Biology	Microbiology, Genetics, Developmental Biology, Biochemistry and Molecular Biology, Biophysics, Bioinformatics, Biochemical Engineering, Bioengineering

II . Faculty

1. Overview of Faculty

SLSB has a proficient and competent team of teaching and research with 123 members including 40 professors and 55 associate professors. Among these members, there are two academicians of the Chinese Academy of Sciences, one member of the Thousand Talents Plan,

seven “Chang Jiang Scholar” Chair Professors, seven winners of the National Outstanding Youth Fund, three Chief Scientists of the Major National Basic Research Program (973), and one National Outstanding Teacher. We also have a number of scholars with outstanding scholarship and academic achievements as well as a group of young academic leaders standing in the frontiers of scientific research.

2. Renowned Professors

No.	Name	Titles
1	DENG Zixin	Chinese Academy of Sciences academician
2	HE Lin	Chinese Academy of Sciences academician
3	MA Xiaojing	Member of the Thousand Talents Plan of the ODCC
4	ZHONG Jianjiang	Distinguished professor of “Chang Jiang Scholar” Winner of Outstanding Young Investigator Award
5	ZHANG Dabing	Distinguished professor of “Chang Jiang Scholar” Winner of Outstanding Young Investigator Award
6	SHI Yongyong	Distinguished professor of “Chang Jiang Scholar” Winner of Outstanding Young Investigator Award
7	XIAO Xiang	Winner of Outstanding Young Investigator Award
8	LIN Shuangjun	Winner of Outstanding Young Investigator Award
9	LI Baojie	Distinguished professor of “Chang Jiang Scholar”
10	SUN Tao	Member of the Thousand Talents Plan of Shanghai
11	LV Hui	Member of the Thousand Talents Plan of Shanghai
12	FENG Yan	973 Chief Scientist
13	WU Ji	973 Chief Scientist
14	GUO Xizhi	973 Chief Scientist
15	XU Ping	Shanghai Jiao Tong University Distinguished Professor
16	ZHOU Ningyi	Shanghai Jiao Tong University Distinguished Professor
17	BAI Fengwu	Shanghai Jiao Tong University Distinguished Professor

III. Achievements

From 2011 to 2014, SLSB hosted or participated in 996 research projects including 54 projects of the National High Technology Research and Development Programs (863) of Ministry of Science and Technology (MOST), 81 projects of the Major National Basic Research Program (973), four of the innovation research groups of National Natural Science Foundation of China (NSFC), 11 of the international (regional) cooperation and exchange

programs, one project of National Youth Science Fund, seven projects of Outstanding Youth Fund, two major research plans of MOST, six major special scientific instruments and equipment development plans of MOST, nine major projects of NSFC, 26 major special projects of MOST, 42 key projects of NSFC, ten key projects for Basic Research of Shanghai Science Committee, and nine key research projects funded by Ministry of Education. There have been 593 SCI papers being published in top periodicals such as *Cell*, *Nature Genetics*, *Nature Chemical Biology*, *Nature Cell Biology*, *Nature Communications*, *PNAS*, *Developmental Cell*, *Genes & Development*, *The Plant Cell*, *Journal of the American Chemical Society*, *Angewandte Chemie International Edition*, *PLoS Genetics*, and *Molecular Microbiology*. Among the professors, Professor Zhong Jianjiang works as an editor-in-chief of *Biotechnology and Applied Biochemistry* (IF: 1.534) and *Process Biochemistry* (IF: 2.627); Professor Wei Dongqing serves as an editor of *Interdisciplinary Science-Computational Life Sciences*. SLSB has won many academic awards including the 1st prize of the Natural Science of Ministry of Education, the 2nd prize of scientific and technological progress of Ministry of Education, Shanghai MuDan Award for Fundamental Science, “He Liang He Li” Award, and Shanghai Meritorious Staff Award, etc.

IV. International Collaboration

1. Student Exchange Programs

SLSB promotes international scientific research cooperation and joint training of students. In 2014, the project of International Joint Laboratory of Metabolism and Development Science of Education Ministry initiated in our school. In 2013, System of Plant Reproduction and Development-Base of Biology Creation and Introduced Intelligence, the project of discipline innovation and introduced intelligence in Colleges and Universities was approved to be constructed. Then, the joint laboratory of mycotoxins research with the university of Ghent in Belgium was set up; the all-round and substantial cooperation with many well-known universities, such as Harvard University, the University of Nottingham, University of Ottawa, Brigham Young University, and University of Adelaide, were carried out with the agreement of joint training, including projects of dual degrees (bachelor, master, and doctor) as well as some exchange projects, like Summer Exchange Program. At present, much exploration has been conducted for internationalized talents cultivation, including the advancement of English curricula construction and the enlargement of international students’ recruitment.

2. Joint Education Programs

“Agreement of Joint training and dual degree of postgraduates and doctoral students” with University of Adelaide;

“Agreement of Joint training and dual degree of undergraduates and doctoral students”

with the University of Nottingham;

Intention of cooperation with Harvard University on joint training of graduate students and joint construction of undergraduate curriculum;

Summer Exchange Program with Brigham Young University, Harvard University, and University of Ottawa.

V. Platforms for Scientific Innovation

Bio-X Institute

Mechanical Biological Institute

Marine Microbiology Institute

Cellular Immunology Institute

The State Key Laboratory of Microbial Metabolism

Education Ministry Key Laboratory for Studies of Genetics of Developmental and Neuropsychiatric Disorders

Joint International Research Laboratory of Metabolic & Developmental Sciences

National Center for Molecular Characterization of Genetically Modified Organisms

VI. Distinguished Alumni

SHI Yongyong

Team leader of Bio-x Research Institute of SJTU; distinguished professor of “Chang Jiang Scholar”; winner of national fund for distinguished young scholars; the alumni of SLSB of 2001.

YU Hao

Lifetime professor of Department of Biology in School of Science of National University of Singapore; vice-president of School of Science; the alumni of SLSB of 1997.

ZHANG Changsheng

A member of “One-Hundred Talents Program” of Chinese Academy of Sciences; the alumni of SLSB of 1994.

TIAN Changlin

A member of “One-Hundred Talents Program” of Chinese Academy of Sciences; vice director of the Center High-Intensity Magnetic Field of CAS; the alumni of SLSB of 1995.

ZHANG Xueli

A member of “One-Hundred Talents Program” of Chinese Academy of Sciences; a member of “Thousand Talents Plan” of Tianjin; the alumni of SLSB of 2000.