



医学遗传学国家重点实验室

建室十周年纪念

(1991—2001 年)

二〇〇一年十二月

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(1991--2001 年)

艱苦創業辛勤耕耘二十年晉身重點
堅持不懈勇于创新創新近十年再攀高峰

賀

醫學遺傳學國家重點實驗室
成立十周年

何鴻恩

二〇一二年十月



正直 责任 良心

Honesty

Duty

Conscience

夏家辉
2001年11月26日

(1995年7月夏家辉教授提出的医学遗传学国家重点实验室“室训”)



中共中央政治局常委、国务院副总理李岚清向“长江学者成就奖”获得者夏家辉院士颁奖

Li Lanqing, the member of the standing committee of the Political Bureau of CPC Central Committee and Vice-Premier of State Council, was awarding the certificate of "Cheung Kong Scholars Achievement Award" to Prof. Xia Jiahui.



序

医学遗传学国家重点实验室已经走完了她的第一个十年的里程，回过头来看看她留下的足迹，每一个正在或曾经在此学习和工作过的人都不免心潮澎湃，思绪难平。

科学研究在一定程度上类似于奥林匹克运动会，研究人员就象运动员，一个研究课题就象一个运动项目，从事同一研究课题的研究人员就象从事同一运动项目的运动员一样，少则几十人，多则几万人或更多，每一个研究人员也都象运动员希望获得奥林匹克的金牌一样而希望能最先发现某一科学的奥秘。但和运动会不一样的是，科学研究的奖项只设金牌，没有银牌和铜牌。正因为如此，我们从建室的第一天起，就将我们的眼光瞄准在“世界第一”上，虽不免有好高骛远之嫌，但作为医学遗传学研究的国家突击队，我们舍此求何！

建室伊始，我们根据学科发展的趋势，结合我们的具体情况，选择了以“染色体显微切割”和“显微基因克隆”为我们争“世界第一”的突破点，逐步建立了一整套分子遗传学的方法技术，并且培养了一大批从事遗传学和相关学科研究的知识型技术人才，他们中的相当一部分目前已活跃于相关学科的前沿，做出了突出的成绩。据统计，我室培养的研究人员先后在《Nature》、《Science》、《Cell》、《Nature Genetics》等国际一流刊物上发表的论文已有十余篇之多，在国际学术界产生了一定的影响。

过去的十年，是失败与成功、悲伤与欢欣循环反复的十年，外生性骨疣基因的克隆仅以二个星期之差与“世界第一”失之交臂，使我们体会到了科学研究竞争的无情和残酷，但也使我们在失败中看到了实力和希望。“神经性耳聋基因”克隆的成功，为我国在遗传性疾病致病基因克隆方面取得了零的突破，标志着我室第一个“世界第一”目标的达成。

在我们回顾建室十周年的时刻，我们要特别感谢那些在我室处于艰难困苦的时刻曾经给予我们支持和鼓励的学校领导、有关政府部门和基金委的领导、学术同行以及历届学术委员会委员，医学遗传学国家重点实验室这棵幼苗的成长凝聚了他们的汗水和心血。

十年的失败与成功的教训和经验，使医学遗传学国家重点实验室逐步走向成熟，一支以学科创始人夏家辉院士、以第二代学术带头人邓汉湘、张灼华教授为核心的年龄和知识结构合理的具有创新、团结和拼搏精神的学术梯队已经形成。我们相信在夏家辉院士的带领下，在第二个十年中，医学遗传学国家重点实验室将创造更多的科学奇迹和“世界第一”。

邓汉湘

2001年11月21日



Preface

It has already been 10 years since the National Laboratory of Medical Genetics was founded. When we look back at its footprints and review its history, everyone who currently works or previously worked in the laboratory cannot help but feel something in common: the special memories of the unusual experiences that last a life time.

Scientific research is like the Olympics in certain ways. The scientists are just like athletes and research projects are like athletic sports. The number of scientists involved in a specific project is similar to that of the athletes involved in an individual athletic sport, they are sometimes dozens, sometimes thousands or more all over the world. Every scientist aspires and set his or her standards to be the first one to discover a scientific principle, just as an athlete sets his or her standards to win an Olympic gold medal. However, in the scientific fields, the scientists generally only recognize the first one who made the discovery and largely ignore the others, unlike in Olympics with the first one winning gold, the second winning silver and the third winning bronze medals. For this reason, we set up our standards: to become "number one" in certain aspects of medical genetics in the world from the first day of this laboratory.

Based on the development of medical genetics and the resources of our laboratory at that time, we chose chromosome microdissection/microcloning as a breakthrough point for us to become the "number one". During the development of microdissection/microcloning, an entire set of important techniques in molecular genetics was established and a large number of knowledgeable scientists with great technical skills were successfully trained. Some of them are now very active in genetic research and related fields. Scientists from our laboratory have published more than 10 scientific papers in the world's most prestigious journals such as *Nature*, *Science*, *Cell* and *Nature Genetics*, having a significant impact on scientific community.

In the past decade we have experienced failures and successes, sadness and happiness. We missed the chance to become the "number one" in cloning the gene for hereditary multiple exostosis type II only by two weeks. That taught us what scientific competition is. Through that failure, however, we saw our strength and a promising future. The successful cloning of the gene responsible for one type of hereditary deafness was the first time for Chinese scientists to clone a hereditary disease gene in China and is the first "number one" for our laboratory.

At the moment when we review the memorable 10-year history of our laboratory, we would like to thank those who gave us support and encouragement in difficult times, including officials of our university, the government, the National Natural Science Foundation, our academic peers and members of the Academic Committee of the National Laboratory of Medical Genetics. The National Laboratory of Medical Genetics would not be the same as it is today without their efforts.

Ten years history makes us more experienced and confident. A research team consisted of Professor Jiahui Xia, a member of the Chinese Academy of Engineering and the founder of this laboratory, Professors Han-Xiang Deng and Zhuto-Hua Zhang along with a number of hard working young scientists with a spirit of innovation and team-work has been formulated. We believe that in the second decade of the laboratory, with professor Xia's leadership, more scientific miracles and "number ones" will be achieved.



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领导的关怀

Concerning from Leaders



夏家辉副教授在“医学遗传学实验室”向陈慕华副总理汇报“临床细胞遗传学”研究工作（1981年）

Associate professor Xia Jiahui reported the clinical cytogenetics research progress to Chen Muhua, Vice-Premier of State Council in 1981.



夏家辉教授在“医学遗传学国家重点实验室”向中共中央政治局委员李铁映同志汇报研究工作（1993年）

Li Tieying, the member of the Political Bureau of CPC Central Committee, listened to a research report given by professor Xia Jiahui in 1993.



李岚清副总理在重点实验室视察 (1996 年 5 月)

Li Lanqing, Vice-Premier of State Council, inspected the Lab in May 1996.



国务委员彭佩云同志在重点实验室检查研究工作 (1997 年 1 月)

Peng Peiyun, State Councilor, inspected the Lab in January 1997.



人大常委会副委员长周光召院士在重点实验室听取夏家辉院士汇报有关耳聋等致病基因克隆情况 (1999 年 9 月)

Academician Zhou Guangzhao, Vice-Chairman of the Standing Committee of National People's Congress, listened to the report on the cloning of deafness gene given by academician Xia Jiahui in September 1999.



人大常委会副委员长吴阶平院士在重点实验室听取夏家辉院士汇报有关实验室研究工作的最新进展 (2001 年 7 月)

Academician Wu Jieping, Vice-Chairman of the Standing Committee of National People's Congress, listened to the research progress report given by academician Xia Jiahui in July 2001.



国家教委主任朱开轩同志来重点实验室检查工作（1992年）

Zhu Kaixuan, Director of the State Education Commission, inspected the Lab in 1992.



国家卫生部部长陈敏章院士在重点实验室听取夏家辉教授有关“遗传病家系收集”的汇报后指示说：“我国的遗传病大家系实际上存在着一个抢救的问题”（1996年12月）

Academician Chen Minzhang, Minister of the Ministry of Public Health, pointed out that we should protect the genetic resource of China after he inspected the Lab in December 1996.



国家科技部部长朱丽兰在重点实验室与夏家辉院士讨论基础研究工作如何“创新”的问题（1999年6月）

Zhu Lilan, Minister of the Ministry of Science and Technology, consulted with academician Xia Jiahui on the innovations in the basic research in June 1999.



国家教育部副部长韦钰院士在重点实验室与夏家辉院士讨论有关国家重点实验室如何培养“创新人才”和“科学管理”等问题（2000年4月）

Academician Wei Yu, Vice-Minister of the Ministry of Education, consulted with academician Xia Jiahui on the issues of creative talents and scientific management of state key Lab in April 2000.



湖南省委书记熊清泉、副省长王向天等来重点实验室看望夏家辉教授
(1989年6月)

Xiong Qingquan, secretary of Hunan Provincial Party Committee, and Wang Xiangtian, vice-governor of Hunan province, received professor Xia Jiahui in June 1989.



湖南省委常委尹长民教授来重点实验室检查研究工作 (1993年9月)

Professor Yin Changmin, the member of the Standing Committee of Hunan province, inspected the Lab in September 1993.



湖南省委副书记吴向东、副省长唐之享来重点实验室检查“基因工程”产品开发情况（2000年5月）

Wu Xiangdong, vice-secretary of Hunan Provincial Party Committee, and Tang Zhixiang, vice-governor of Hunan province, inspected the progress on the gene engineering products in May 2000.



湖南省委书记杨正午在重点实验室现场办公，与夏家辉院士研究开发“基因工程药物”、建立“湖南省基因工程药物中试基地”等问题（2001年6月）

Yang Zhengwu, secretary of Hunan Provincial Party Committee was on-the-spot meeting and consulting with academician Xia Jiahui on the investigation of gene engineering drugs and establishment of mid-scale test base of gene engineering drugs in June 2001.