

# Peking University Health Science Center

# Introduction

by Baiyu Xu Office of International Cooperation, PUHSC

# **Peking University**

- + The first established modern national university in China, founded as the "Imperial University of Peking" in 1898
- + Listed by domestic and international rankings as one of the top universities in China
- + A comprehensive and national key university
- + A member of the C9 League
- + Renowned for its campus grounds, and the beauty of its traditional Chinese architecture
- + Has educated and hosted many prominent modern Chinese thinkers



2018 Rank: =27

View full ranking table







QS World University Ranking
#=38

Overall Score: 80.8%

Academic Reputation: 99.8%

Citations per Faculty: 61.7%

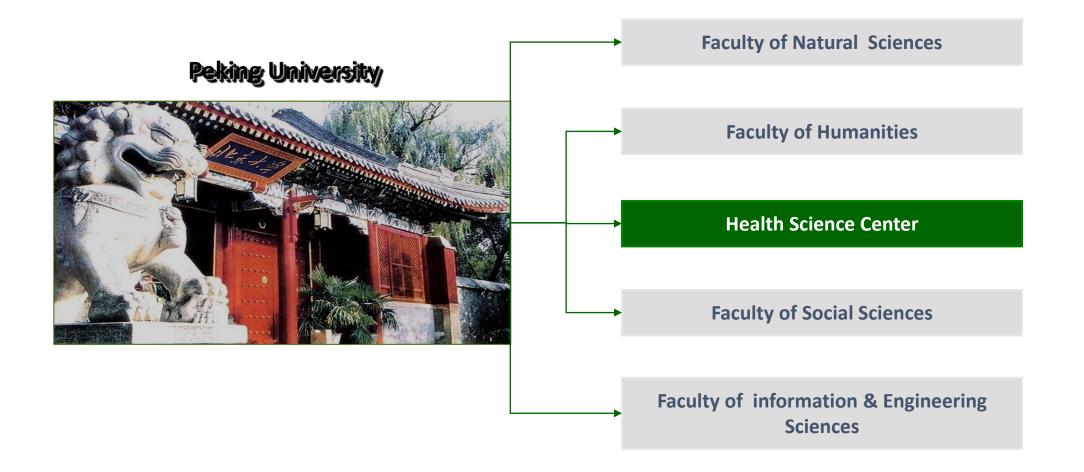
Employer Reputation: 99.9%

Faculty Student: 66.6%

International Faculty: 52.8%

International Students: 48.5%

# Current Structure of PKU









- Medical Service
- B Medical Education
  - Medical Research
    - International Cooperation





# **General Information**

# A Brief History of PUHSC



# Mission: To improve people's health in China and around the world through excellence in education, research and patient care







Value: Diligence, rigor, objectivity and creativity

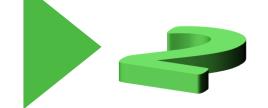
1985 2000 1946 1912 1952 Peking National Peking Beijing Beijing University **Medical School** University Medical Medical **Health Science** of Beijing **Medical School** College University Center





Total Staff	11470	Students		Graduates Program	
Professor and Associate Professor	962+1212	Undergraduate	3620	Academic Doctoral Programs	65
Academician	12	Postgraduate	4771	Professional Doctoral Programs	18
Affiliated Hospitals	10	Overseas Students	377+162	Academic Master's Programs	71
Teaching Hospitals	14			Professional Master's Programs	24





# **Medical Service-2016**



### **Medical Service 1**







**The First Hospital** 

**People's Hospital** 

**The Third Hospital** 

**Cancer Hospital** 

**Dental Hospital** 

Mental Health Hospital

Shougang Hospital

**Shenzhen Hospital** 

**International Hospital** 

**Binhai Hospital** 





### **Medical Service 2**





Beds	9884
In-patients released	462,083
<b>Out-patients treated</b>	17,510,781
Emergency care	1,368,154
Operations	212,045









### **Peking University International Hospital**

关村国际生命医疗园

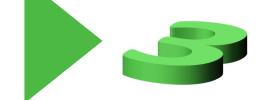
Scale: 1800 beds, 300,000 square meters construction area











# **Medical Education**

# Medical education in China

- 155 medical schools in mainland China
- 151 public , 4 private

#### **Category of medicine**

Category	Number
Medicine	129
Traditional Chinese Medicine	24
Tibetan Medicine	1
Mongolian Medicine	1
Total	155



820 students each year, and 240students major in Medicine.



**Peking University Health Science Center** 

#### **On-campus Schools**

**School of Basic Medical Sciences** 

**School of Pharmaceutical Sciences** 

**School of Public Health** 

**School of Nursing** 

**School of Foundational Education** 

Schools of Clinical Medicine

(Affiliated Hospitals)

The First School of Clinical Medicine

The Second School of Clinical Medicine

The Third School of Clinical Medicine

**School of Oncology** 

**School of Stomatology** 

**Institute of Mental Health** 



### Medical Education Reform at PKUHSC



Strengthen medical students' professionalism, team spirit and overall competencies

Set up new disciplines (G.P, GH, CCHDS, MH)

Reform curricular systems under the principles of autonomous learning and PBL

Provide medical students with more exposures to primary care practice and international health care environment

# **Undergraduate Programs**

820students each year, and 240 students major in Medicine.

#### Leading to Doctoral degrees

- Clinical medicine (8-year)
- Basic Medical Sciences (8-year)
- Stomatology (8-year)

#### Leading to Master's Degrees

- Pharmaceutics (6-year)
- Preventive Medicine (7-year)

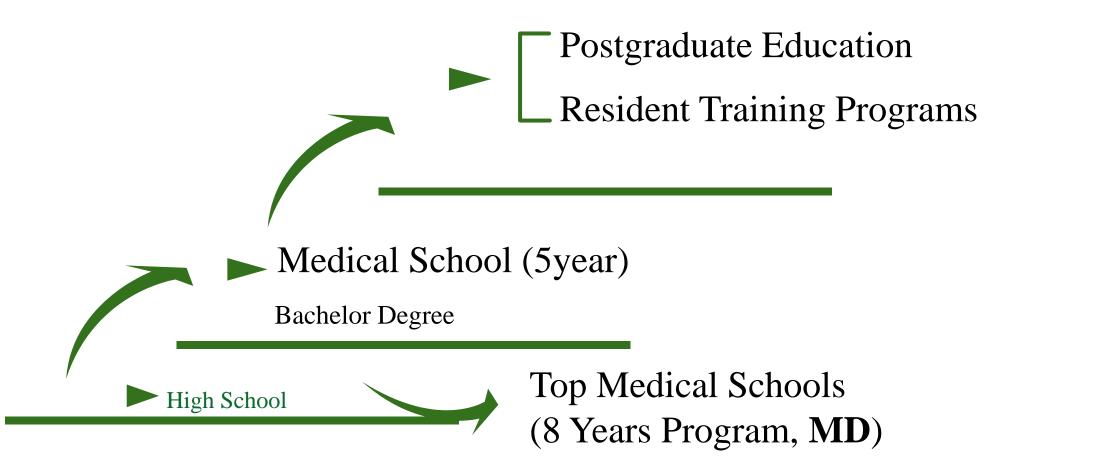
#### Leading to Bachelor's degrees

- Clinical Medicine(5-year)
- Stomatology (5-year)
- Stomatological Technology(4-year)
- Nursing (4-year)
- Bio-medical English (5-year)
- Laboratory Diagnosis (4-year)
- Laboratory Experiment (4-year)





# **Medical Education System in China**



### Example: Program of Clinical Medicine

### • Clinical Medicine (8-year program)

year	curriculum	location	
1 <sup>st</sup>	Pre-medical: Natural science/social science/humanities	PKU campus	Early Expose
2 <sup>nd</sup> -3 <sup>rd</sup>	Pre-clinical: Lectures+20 cases study +lab experiments	PKUHSC campus	To: Clinic &
4 <sup>th</sup> -5 <sup>th</sup>	Clinical learning: Lectures +case study +PBL	General hospitals	Science research
	Clerkship +internship(36w)	Medical	
6 <sup>th</sup> -8 <sup>th</sup>	<b>Clinical practice:</b> Rural practice(4w) oversea clinical practice(4-8w)+Clinical rotation: at least 24 m	institutions	
	Clinical research:6m		





# **Medical Research**





State Key Laboratory	1
National Engineering Laboratory	1
Ministry/City Key Laboratories	37
Ministry Engineering Research Center	2
Key Laboratory of State Administration of Traditional Chinese Medicine	4
Research Institutes	23
Research Centres	50
Research funding (2010-2016)	3.127 billion RMB
Industries & tech transfer (2010-2016)	0.828billion RMB
Projects funded (2010-2016)	6257
International journal (2016)	1903(SCI)

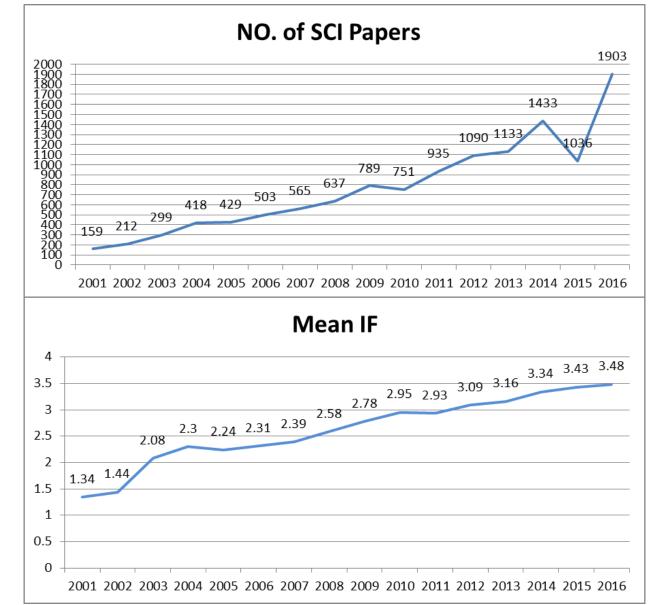








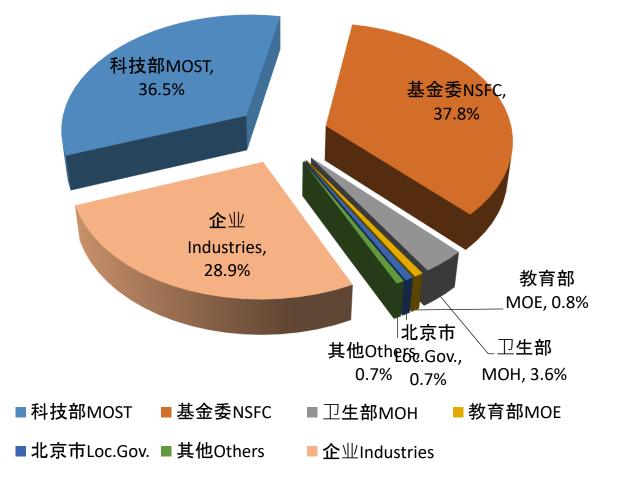
# **Research Publication (2001-2016)**



 SCIENCE •NATURE •CELL I ANCET •NEW ENGL J MED •NAT GENET •NAT REV CANCER NAT BIOTECHNOL •JAMA-J AM MED ASSOC LANCET NEUROL •NAT CELL BIOL • J CLIN ONCOL •LANCET INFECT DIS • MOL PSYCHIATR •J EXP MED •J NATL CANCER I CIRCULATION MOL CELL







### Total: 3.127 billion RMB

Government Special Funding

"211" Project

1996-2000: 20M USD 2002-2005: 7M USD 2008-2013: 23M USD

### "985" Project

2000-2003: 65M USD 2004-2007: 67M USD 2008-2009: 16M USD 2010-2013: 115M USD

National "Double First-rate" Plan

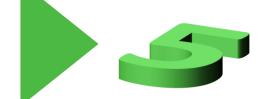
2017: 352.15 million RMB

# **Research areas of priority**

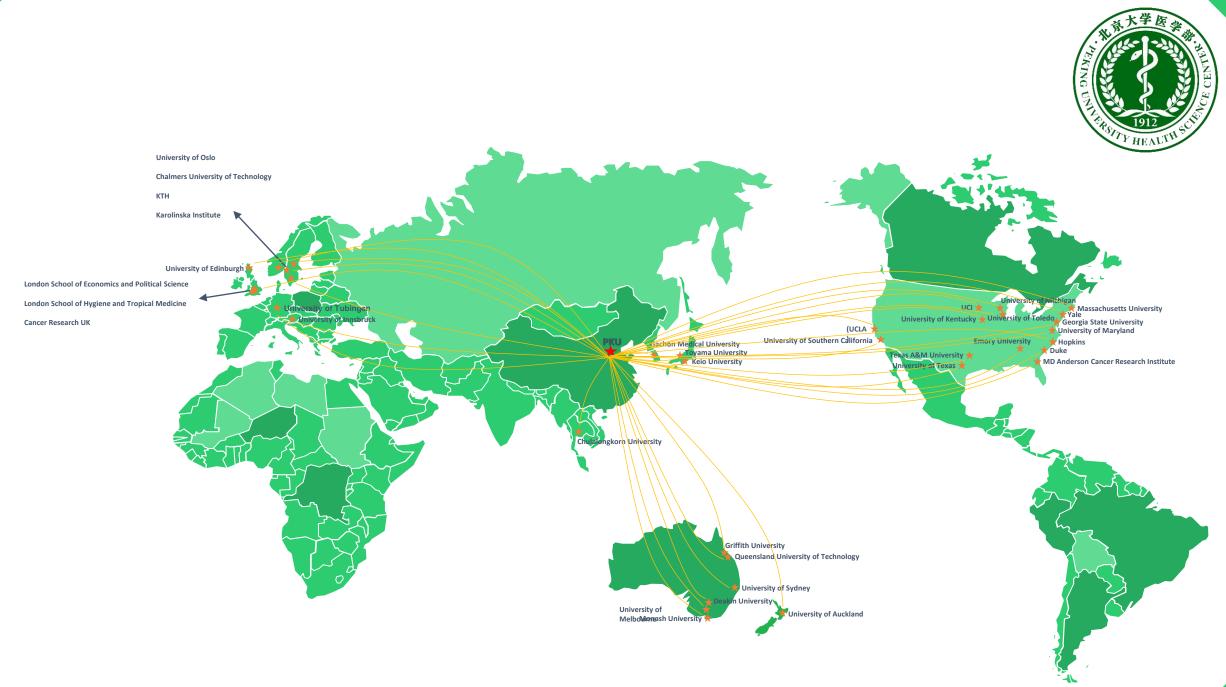
- Functional Genomics of Human Diseases
- Cardiovascular Diseases
- Cancer Research
- Stem Cell Research
- Reproductive medicine and Child Health
- Viral and Infectious Diseases
- Diabetes and other Immune-related Diseases
- Genetic diseases
- Neuroscience
- Ageing and senescence
- Public Health and Preventive Medicine
- Pharmaceutical Sciences
- Nursing
- Stomatology
- Interdisplinary biomedical research







# **International Cooperation**





# Fast Facts – Strategic Partnership



		Y HEAU
	The University of Massachusetts	University of California, Los Angeles (UCLA)
	Duke University	University of Kentucky
	Georgia State University	Harvard University
	Johns Hopkins University	University of Michigan
USA	MD Anderson Cancer Research Institute	University of Nebraska Medical Center
USA	Northwestern University University of Southern California	University of Texas Health Science Center at Houston
	, Texas A&M University	University of Pittsburgh
	The Emory University	Yale University
	University of California, Irvine(UCI)college of Medicine	UC Davis
	University of Adelaide	Queensland University of Technology
Australia	Australian National University	The University of Sydney
	Griffith University	The University of Melbourne
	LaTrobe University	University of Queensland
	Monash University	

# Fast Facts – Strategic Partnership-con't



	Yonsei University		Cancer Research UK	
	National Seoul University		University of Edinburgh	
Korea	Gachon Medical University	United Kingdom	London School of Hygiene and Tropical Medicine	
	Korea University	United Kingdom	King's College, London	
	Keio University		University of Birmingham	
Japan	Toyama University Osaka University		University of Manchester	
	Nagoya University	Ireland	Hibernia College	
	Juntendo University	Germany	University of Tubingen	
	Karolinska Institute	Norway	University of Oslo	
Sweden		Finland	University of Helsinki	
Sweden	Chalmers University of Technology	Austria	University of Innsbruck	
	КТН	Tailand	Chulalongkorn University	
	University of Groningen	Singapore	National University of Singapore	
Holland	Erasmus University		Chinese University of Hong Kong	
	Utrecht University	Hong Kong	University of Hong Kong	
Canada	University of British Columbia		Hong Kong University of Science and	

# **Main Forms of Collaboration**

Colla	boration forms	Examples
Student and staff exchange		
	Student/staff exchange program with	<ul> <li>Short-term Student Exchange Program (4-8 weeks): collaborating with 34 high ranking oversea universities or institutions; in 2016, 161 PUHSC students went overseas for:</li> <li>clinical rotation; clinical observation; research rotation; public health program 32 students from our oversea partner universities came for:</li> <li>clinical clerkship; public health course; traditional Chinese Medicine Course</li> </ul>
Joint	education program	
	Joint training program	Collaboration with our partner universities, e.g. University of Michigan, University of Pittsburg, Edinburgh University, Karolinska Institutet, etc.
	MD+PhD:	Collaborating with 15 high ranking oversea universities , 63 students have participated in this program so far
Inter	rnational Scholarship	>20, e.g.
·	Toyama University Scholarship	(support 2 students and 2 faculty annually)
	Stanford HoHoLi Fellowship	(1 fellow)
	Cancer Research UK Scholarship	(3 pos-doc)
	University of Kentucky	(2 faculty in pharmacy)
	Dr Cheng Yu Tung Fellowships	(2 faculty)

# **Partner Universities/Institutions for Student Exchange**



	The University of Massachusetts	Canada	University of British Columbia
	Yale University	Canada	University of Alberta
	University of Pittsburgh	Sweden	Karolinska Institute
	University of Michigan	Holland	Erasmus University
USA	Northwestern University		Utrecht University
	MCPHS	Norway	University of Oslo
	UCLA	Denmark	Metropolitan University College
	UC Davis	Thailand	Mahidol University
	Alpharetta Family Medical Clinic, GA		Chulalongkorn University
	The University of Sydney	Singapore	National University of Singapore
			Gachon University
	Queensland University of Technology	Korea	Seoul National University
Australia	Australian National University		Yonsei University
	University of Adelaide		Osaka University
	University of Queensland		Keio University
United	King's College, London	Japan	Juntendo University
	University of Edinburgh		Nagoya University
Kingdom	University of Birmingham		Chinese University of Hong Kong
	University of Manchester	Hong Kong	University of Hong Kong

# Various Forms of Collaboration-con't



Collaboration forms	Examples	
Joint meetings/symposiums	>10 annually, e.g.	
	Lancet-CMB China and Global Health in the 21 <sup>st</sup> Century Initiatives 2008, 2010	
	International Conferences on Medical Education	
	PUHSC-UMHS joint symposia	
	Second Global Symposium on Health Systems Research 2012 with WHO	
Joint Research Lab/Center	e.g.	
	Sino-Swedish Joint Research Center (with Karolinska Institute)	
	Sino-Austrian Biomarker Center (with University of Innsbruck)	
	PUHSC-Toyama University Joint Pharmaceutical Research Center	
	Sino-Australian Center for Excellence in Stem Cell Sciences	
	PUHSC-UMHS Joint Institute for Translational and Clinical Research	
	PUHSC-MAHSC Joint Centre for Genomic Medicine	
	The University of Melbourne and Peking University Center for Psychiatric Research and Training	
	PUHSC-KCL Joint Institute for Medical Research	
University Day	Emory University Day	
	Karolinska University Day	
	Sydney University Day	

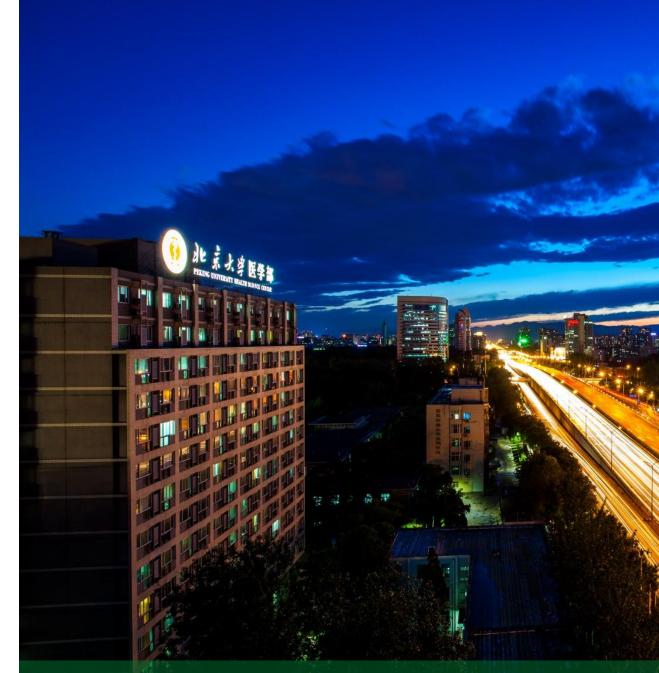
# Various Forms of Collaboration-con't



Collaboration forms	Examples
NGO	WHO, UNICEF, CMB, Project Hope,
Company/Industry	Johnson & Johnson
	<u>Pfizer</u>
	<u>Roche</u>
	AstraZeneca
	<u>Novartis</u>
	GlaxoSmithKline
	Sanofi-Aventis
	Eli Lilly



### Thank you!



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