

# Research Quality - Singapore vs. Philippines

PHIL	SING	MAL	INDON	VIET	THAI	HK	S KOREA	JAPAN	TAIWAN	CHINA
UP 70 (2015) 63 (2014)	NUS 1 1	UM 29 32	UI 79 71	VNU-H 151-200 161-170	Mahidol U 44 40	UHK 2 3	KAIST 3 2	UTokyo 12 10	NTU 22 21	Peking U 7 8
ADMU 114 115	NTU 4 7	USM 49 57	Bandung IT 122 125	VNU-HCM 201-300 191-200	Chula U 53 48	HKUS&T 5 5	SNU 8 4	Osaka U 13 13	NChiao Tung U 31 29	Tsinghua U 11 14
UST 143 141		UKM 56 56	U Gadjah Mada 137 145		Chiang Mai U 99 92	ChinUHK 6 6	Pohang U 10 9	Kyoto U 14 12	N Tsing Hua U 31 33	Fudan U 16 22
DLSU 181-190 151-160		UTM 61 66	Airlangga U 147 127		Thammasat U 143 134	CityUHK 9 11	Sungkyunkwan U 17 17	Tokyo IT 15 15	N Cheng KungU 36 36	US&TChina 23 25
		UPM 66 76				HKPolyU 27 27	Yonsei U 18 16	Tohoku U 20 18	NTU S&T 45 51	Shanghai Jiao Tong U 24 28
						HKBapU 51 45	Korea U 21 18	Nagoya U 21 20	Taipei Med U 47 46	Nanjing U 26 26
							Hanyang U 30 29	Hokkaido U 25 23	N Yang Ming U 50 49	Zhejiang U 35 31
							Kyung Hee U 38 37	Kysuhu U 28 24	NCU 60 59	Beijing NU 40 42
							Ewha U 43 39	Tsukuba U 33 34	NTNU 64 75	SunYatSeU 48 54
							Sogang U 61 54	Keio U 37 35	N Sun Yat Sen U 69 73	Nankai U 52 50
								Waseda U 39 44		Xi'an Jiaotong U 55 57
								Kobe U 41 43		Wuhan U 58 63
								Hiroshima U 53 47		Tongji U 63 65
								TMDU 65 61		Harbin IT 68 77

**QS Asia University Rankings  
2014 and 2015**

**Comparison of Rankings of  
Selected ASEAN and East Asian Universities**

University of the Philippines, 2015

**How do we differ from Singapore in Developing World Class Research Talent that Contribute to GDP?**

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Let's take a look at Research Talent

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# What our Low Research Ratings Might Be Telling Us ...

## **Singapore R&D**

Funded State of the Art Research

Nonlinear Process Innovation

Strategic Research Portfolio

International Collaboration

Seasoned & Young Researchers

## **Philippine R&D**

Under funded 'Capacity Building'

Academic with Weak Industry Links

Gov Determines Priorities

Manila Centric in Funding

Teaching Faculty & few Researcher

## **SINGAPORE R&D Talent Framework**

The R&D talent framework, through the different areas of impactful research, builds up a base of talent that crosses disciplinary boundaries.

### **National Research Foundation - Interdisciplinary research**

The Singapore [National Research Foundation \(NRF\) Fellowship scheme](#) is a key initiative to attract and root young scientific talent to Singapore. The NRF Fellowship is open to all areas of science and technology, and scientists of all nationalities are welcome to apply. NRF Fellows are given complete independence and freedom to pursue their own research directions. They are also free to choose the host organisation which they think is the best environment for their research.

The Returning Singaporean Scientists Scheme seeks to attract back talented and established overseas-based Singaporean researchers and provide them with the funding and opportunity to relocate their research to Singapore. Under this scheme, NRF provides opportunities for highly capable Overseas Singaporeans (OS) to continue their research careers in Singapore and eventually take up research leadership positions here.

### **Ministry of Health - Biomedical research**

The Ministry of Health (MOH)'s [talent development programmes](#) seek to nurture and support a critical mass of clinician scientists in Singapore. Clinician scientists perform research, and convert laboratory discoveries into new drugs, devices and diagnostics that benefit patients in the treatment of diseases and illnesses. These programmes build Singaporean talents through scholarships, research training fellowships, and research grant awards. Such efforts have attracted some Singapore clinician scientists who have built their reputations overseas, to return home to mentor the next generation.

The MOH Research Scholarships are awarded to outstanding clinicians in their final year Basic Specialist Training, Advanced Specialist Training and Residency Training. Applicants should be working in public health institutions, and have the desire to pursue a PhD in health and medical research.

### **Agency for Science, Technology and Research (A\*STAR) - Undergraduate and Graduate Research**

A\*STAR has pioneered [a series of programmes](#) to grow the local PhD talent pool in the research institutes (RIs) and increase the enrollment of Singaporean students in the engineering and science PhD programmes at the local universities. A number of PhD scholarship programmes were launched in 2001 to build a pipeline of local PhD talents, and to date, A\*STAR has attracted more than 1,000 talented young local PhDs, of which 25% of A\*STAR fellows and scholars have completed their training and are contributing to R&D in the public or private sector. The remaining majority are in the process of working towards a PhD or obtaining post-doctoral experience.

A\*STAR has also initiated an extensive range of outreach programmes to develop and sustain a pipeline of young talent. Through these programmes, A\*STAR works closely with the Ministry of Education, Science Centre Singapore, schools and the scientific community to augment the capacity of educators and scientists to mentor and guide students in research projects. The [Singapore Academy for Young Engineers and Scientists \(SAYES\)](#) has been established to galvanise the enthusiasm and energy of aspiring scientists. This youth movement will be a platform for students to explore and stay engaged in science, technology, engineering, and mathematics.

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### **Clinicians for a PhD in Medical Research**

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## **Develop and Sustain a Pipeline of Young Talent**

### **Harness the Pipeline of Young Filipino PhDs Abroad**

100-300 PhDs in S&T in the next three years will be graduating worldwide  
State of the Art Research (3-10 Publications) in Hot Multidisciplinary Fields  
Ask them to propose a return to the Philippines to develop research programs

### **Focus on Funding Researchers not Institutions**

Attract Filipino Research Talent with Recent PhD in S&T to Come Home  
Researchers are funded for three years at any Institution  
Innovation Center, Industry-Academe Partnership, Academe, Industry Institute

### **Bring Back 5 Young Researcher Every Year for 5 Years**

Select them for Viable Spin-Offs to Industry / Entrepreneurship Potential  
Select them for the Research Network for International Collaborations  
Create Research Faculty Positions for the Returnees