

Mahidol Universities: Roles of Academic Staffs & Researchers



ศ.นพ. บรรจง มไหสวริยะ



What is the Education for?

ความต้องการของมนุษย์

Self-Actualization

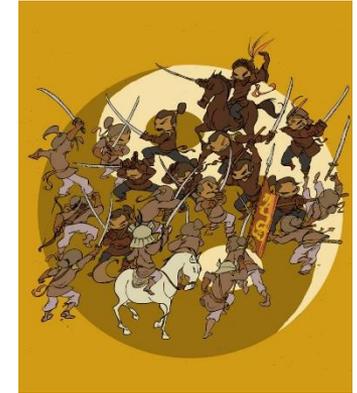
Esteem

Love, Affection & Belongingness

Safety

Physiological/ Survival

Abraham Maslow (1908-1970)

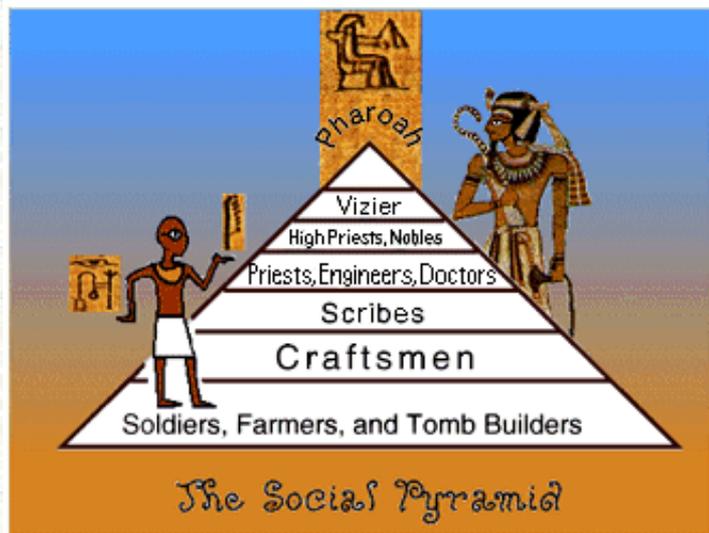


- War & social changes were disrupting everyday life
- These philosophies helped guide people to a better life

“Learn to Live Together”



Education for Occupation & Profession



Learn to Do (for job)
Learn to Be (in society)
(เป็นผู้ได้รับการฝึกฝน)

OCCUPATIONAL

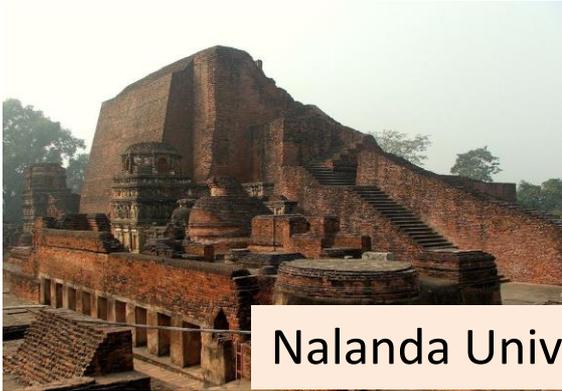
Bauer Farmer		Schmidt Smith
Becker Baker		Schneider Tailor
Klingemann Weapons smith		Schulze Constable
Maurer Mason		Topfer/Toepfer Potter
Meier Farm administrator		Wagner Carter/Cartwright
Muller Miller		Weber Weaver

Fleischer or Metzger
Butcher





Education for the Advancement



Nalanda University (5th Century)

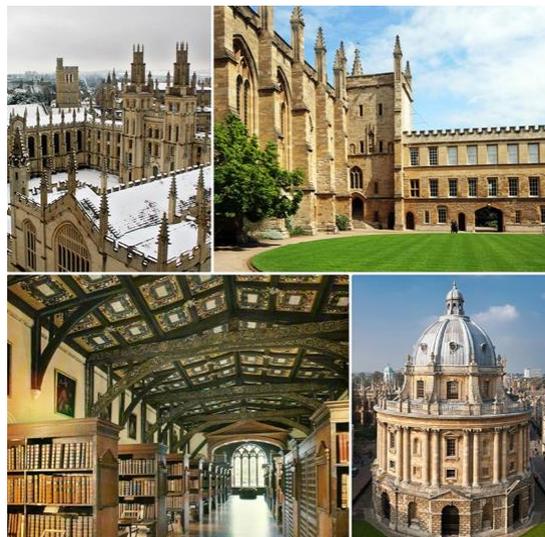


Beginning of the University

Knowledge-> physical based:
People, Record, Location



Univ. of Bologna (1088)



Univ. of Oxford (1096)

Learn to Learn

(To Explore & Discover)

(เป็นผู้ใฝ่รู้และมีวิจารณญาณ)



Education & Globalization



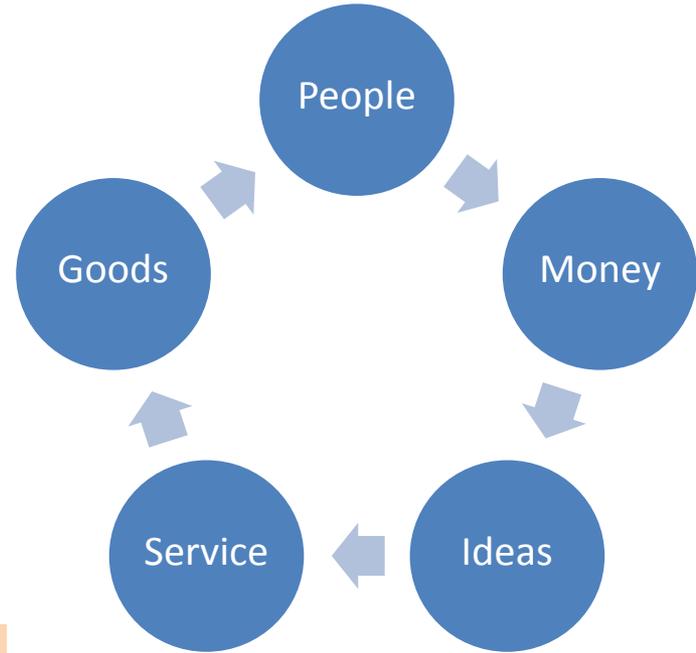
We are here



Knowledge is Universal
Connectivity is more IT-based

From local to global market:
need, quality, competition

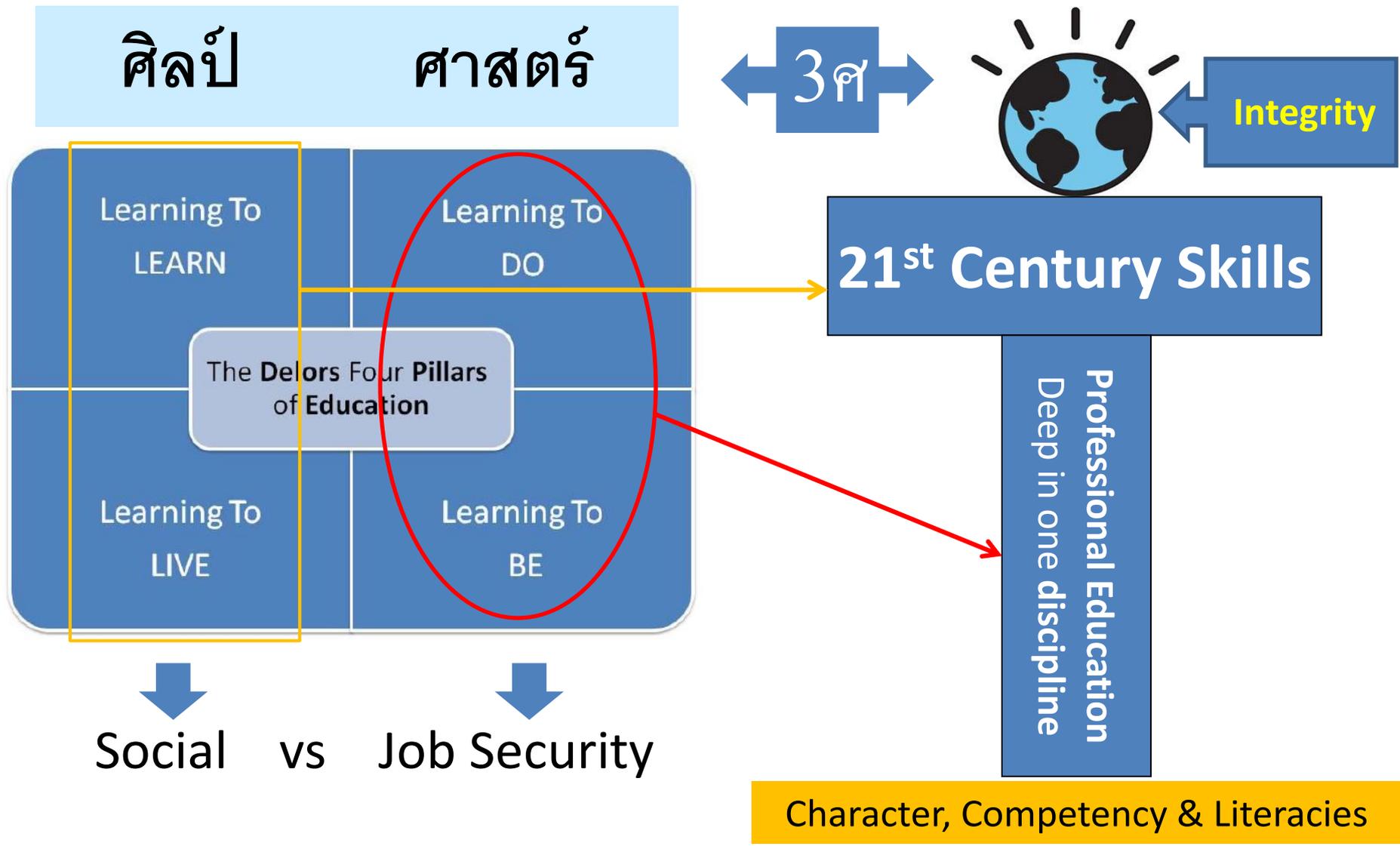
Local ↔ Global



โลกเป็นตลาดเดียว



Human Capital





Knowledge Capital

- **Repository of the Knowledge:** to maintain & secure crucial knowledge for present & future generations
- **Generating of new Knowledge:** the activity that we call “research”
- **Transferring Knowledge:** what we call “education”
- **Transferring Knowledge to Society:** what we call “dissemination”
- **Generating economic development:** to play an integral role in furthering economic growth



Knowledge:

- international
- good to be traded
- Knowledge-based economy
- University->international entity
- Connectivity is more virtual/IT-based

Knowledge is
“Power”

“Countries that participate in global flows gain exposure to **ideas**, **research**, **technologies**, **talent** and **best practices** from around the world.”



Strengthen Research & Innovation

**New
Frontier**

New Theory
New Discovery
New Mechanism

Research Strategies

Key National & Global
Agenda
Centers of Excellence
Research Clusters
Strategic Partners

**Industrial
impact**

Biotec
Robotics
Food safety
Drugs & Nutritions
Medical innovations

**Cultural
Impact**

Music
Fashion design
Creative tourism

**Social
Impact**

Ageing

- Policy
- Health innovation

Emerging Diseases

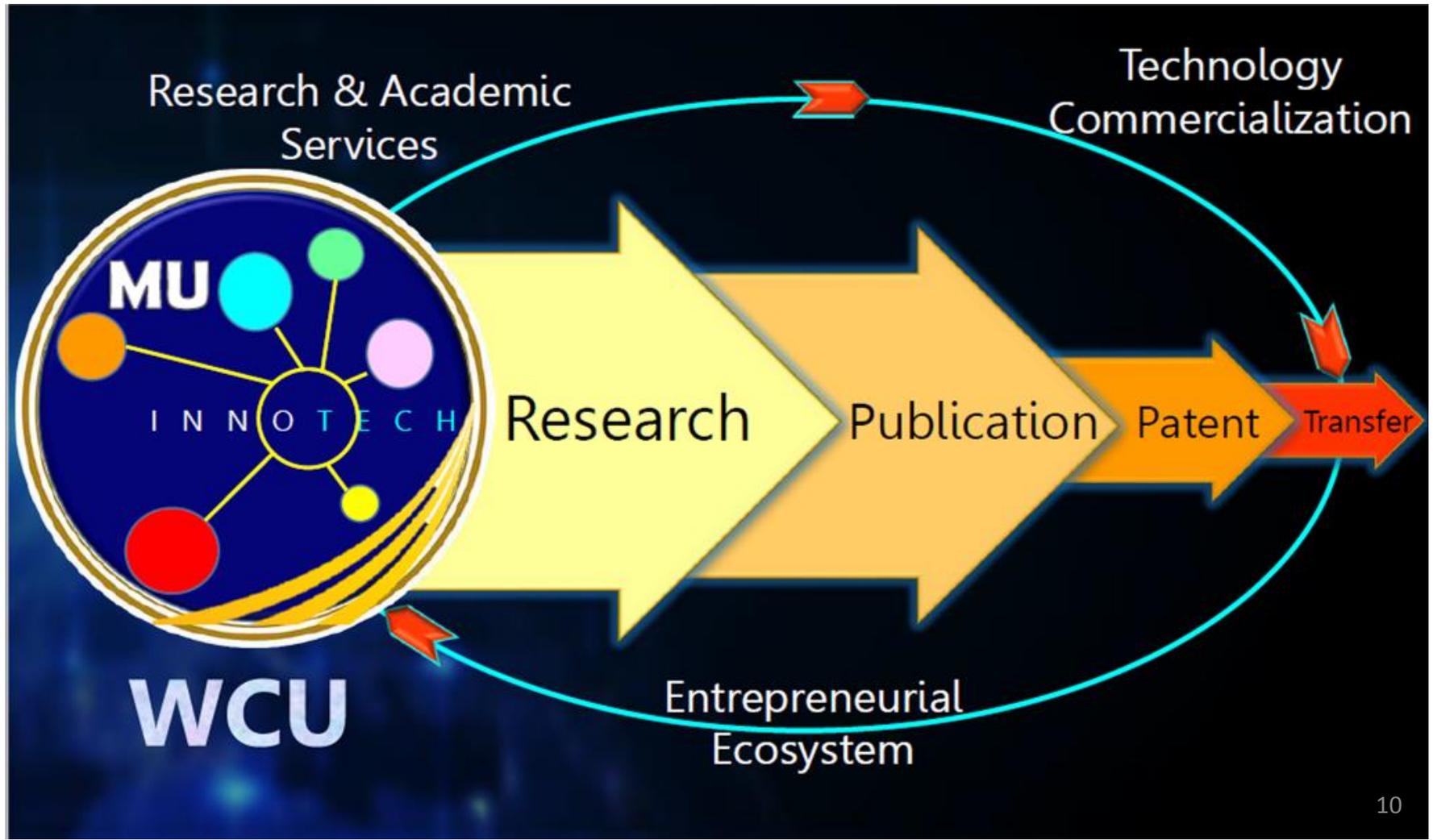
- Policy & control

Inclusive Society

- Disable policy
- Assistive innovation



INNOTECH – INT





Concentration of talent

(Jamil Salmi)

WCU
(World Bank)

Abundant resources

- Public budget resources
- Endowment revenues
- Tuition fees
- Research grants

Money

- Students
- Teaching staff
- Researchers
- Internationalisation

Man

Graduates

Research output

World Class University

Technology transfer

- Supportive regulatory framework
- Autonomy
- Academic Freedom
- Leadership team
- Strategic vision
- Culture of excellence

Favorable governance

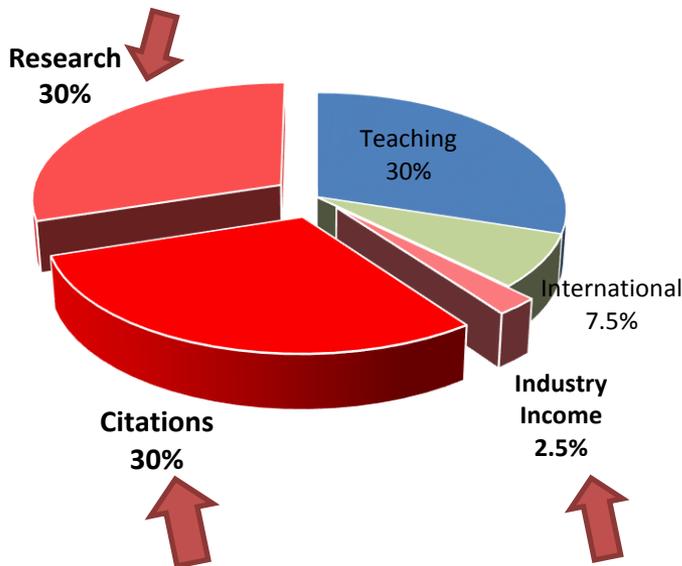
Management



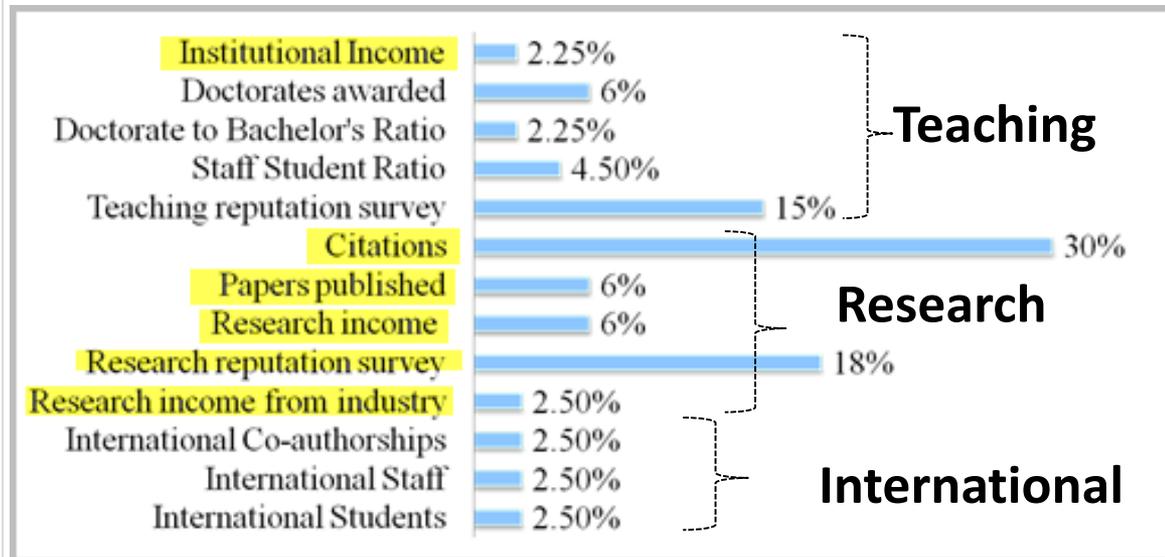
U-Ranking: Matrix for Scoring

The Really Big Picture: University Rankings Metrics Importance of Research - THE

THE Ranking -Metrics



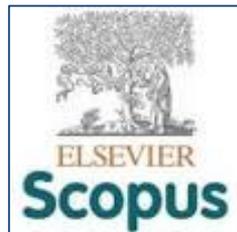
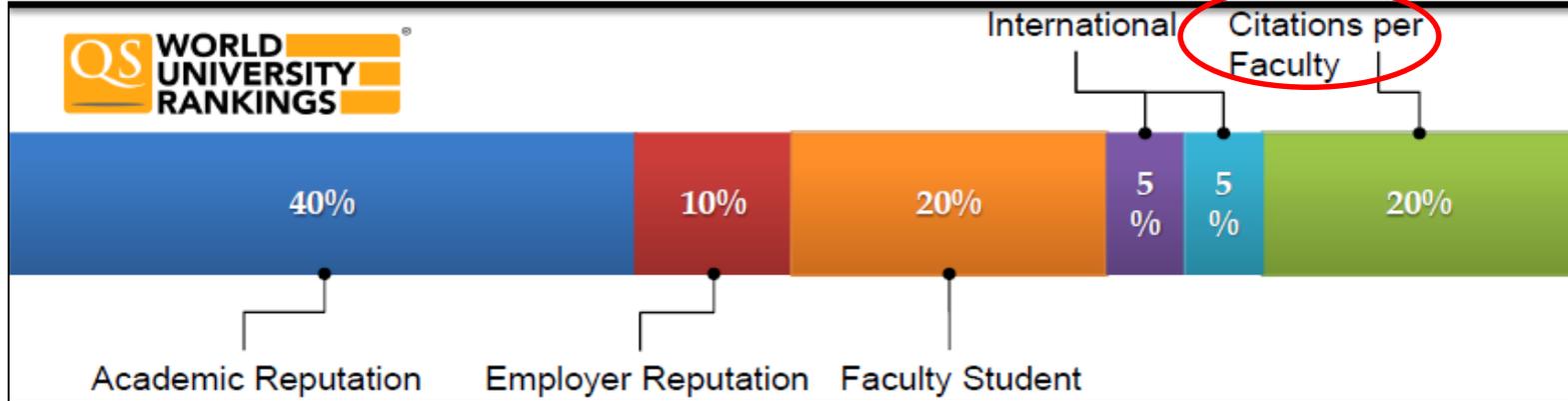
Research related metrics account for 64.75%



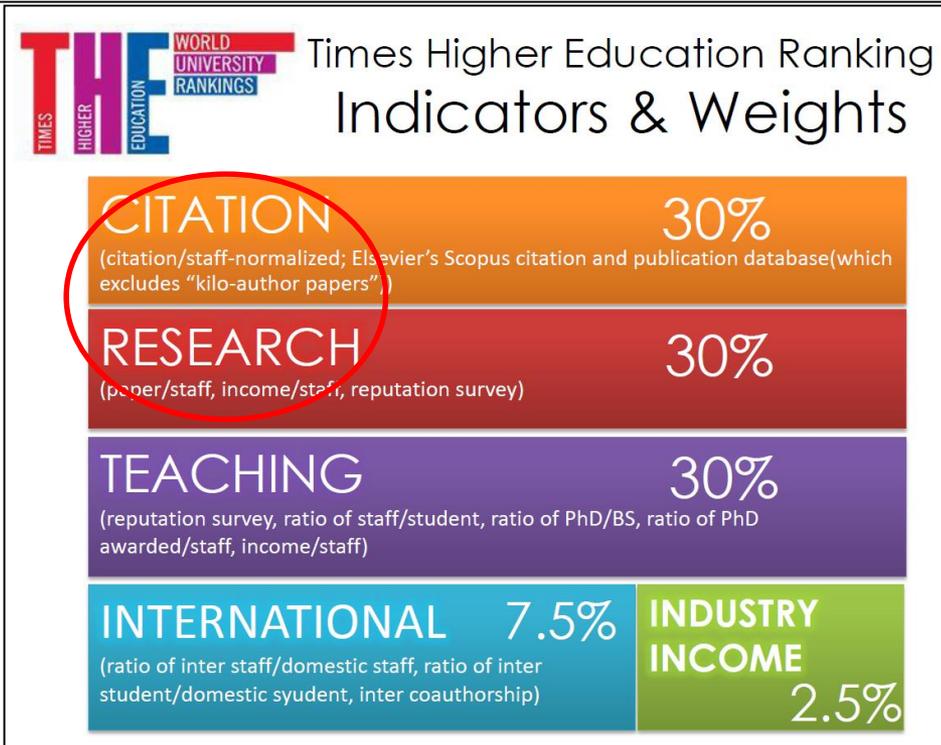
Reputation: Resulted from all 3 components @ international level through quality & visibility



U-Ranking: Research impact is crucial



Visibility in Data Base
Papers vs Citations





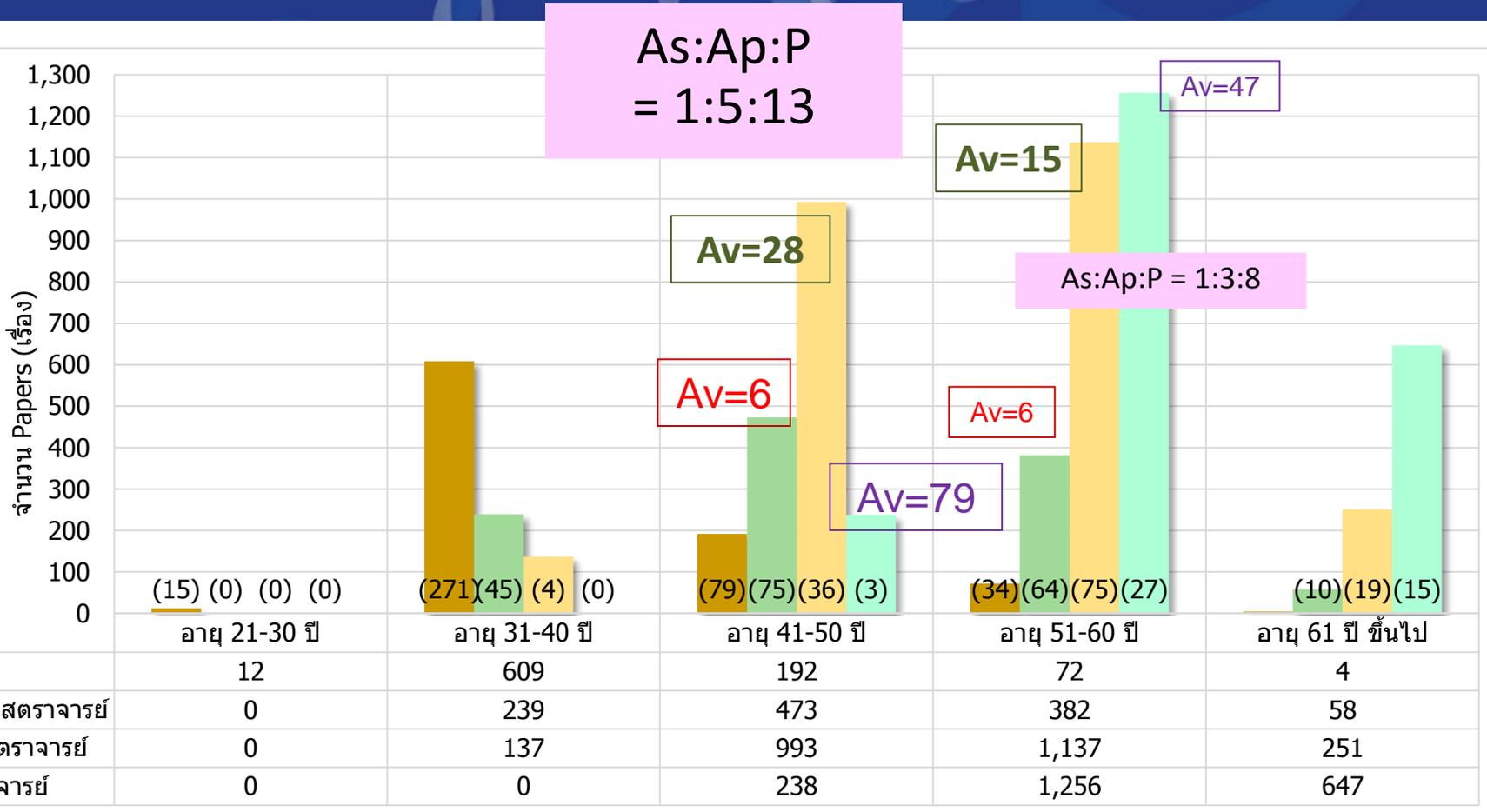
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International Collaborations: Activities & Joint Research Units





Research Output: Academic position



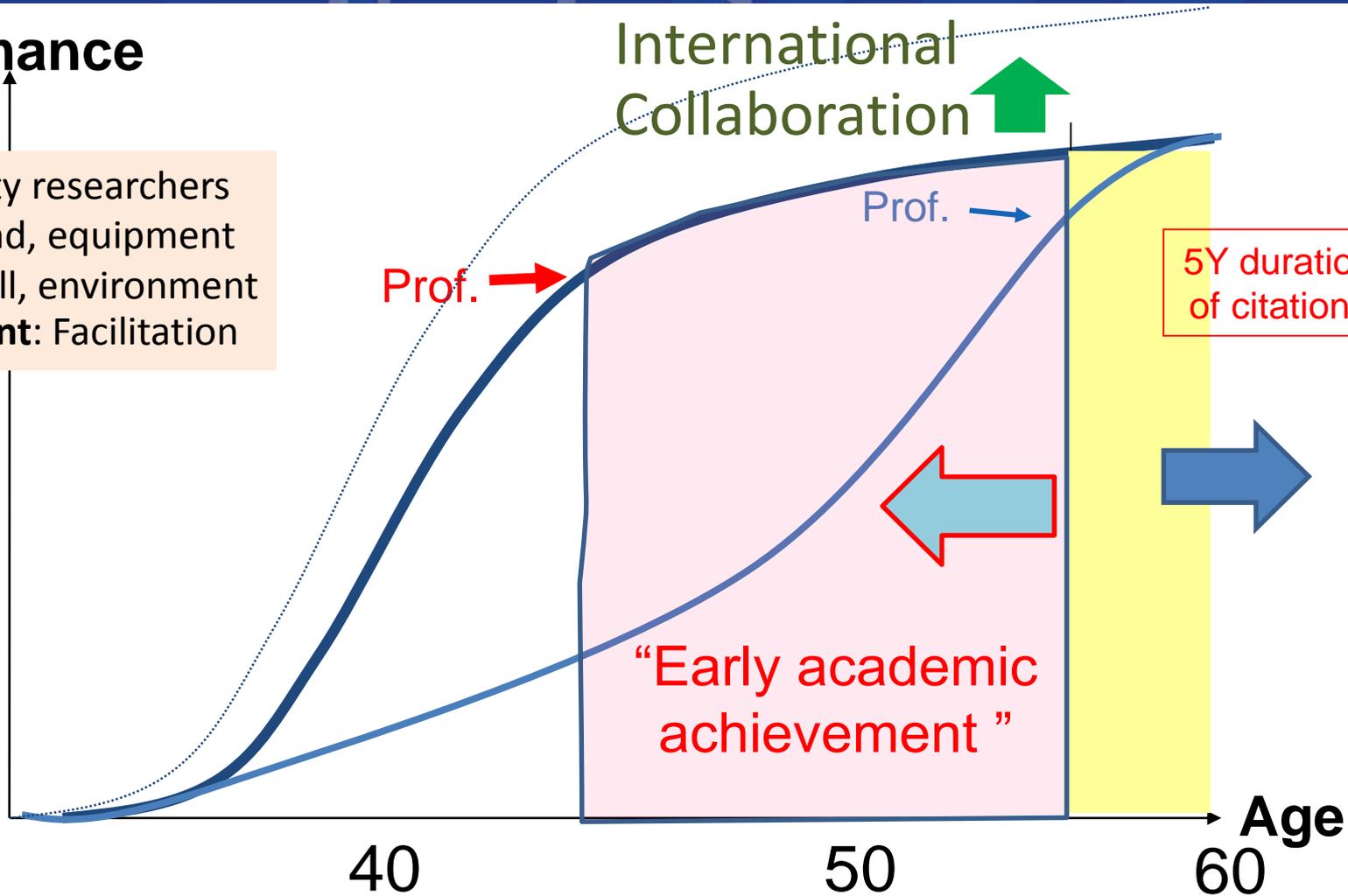
*หมายเหตุ: - สืบค้นข้อมูลผลงานตีพิมพ์ จากฐานข้อมูล Scopus ณ วันที่ 19 มกราคม 2559
- คำนวณอายุของบุคลากร ณ วันที่ 31 กรกฎาคม 2558



Performance curve: Individual/team

Performance

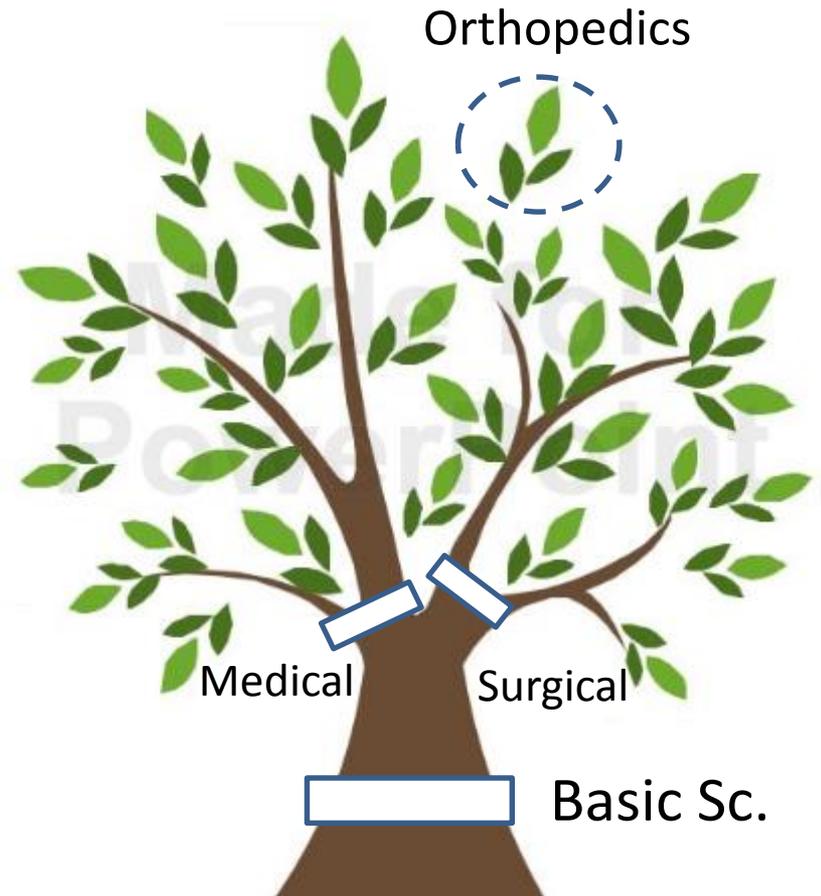
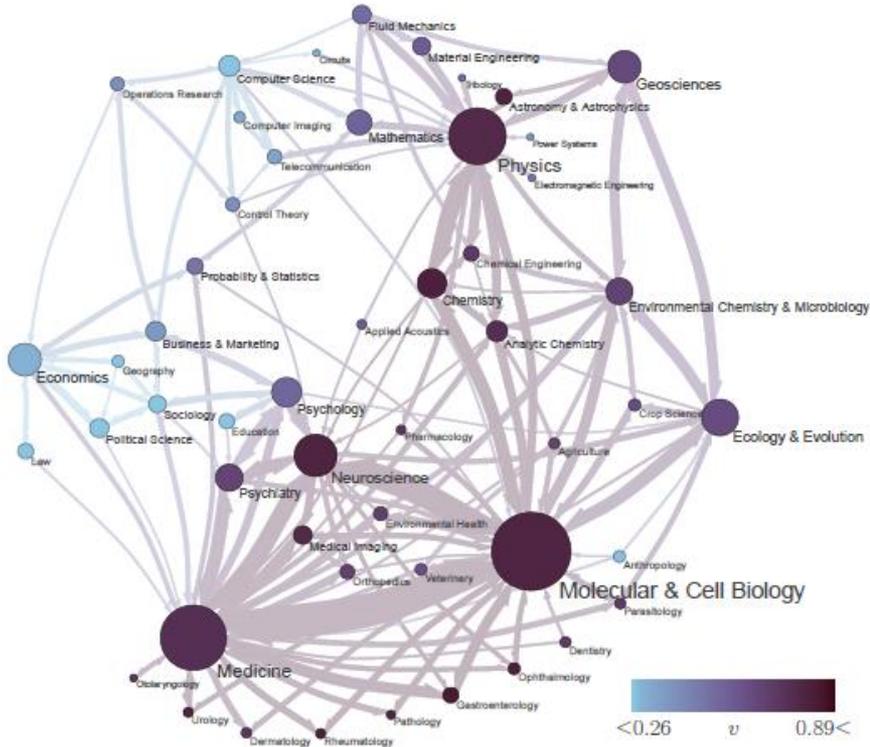
Man: Quality researchers
Money: Fund, equipment
Mentor: Skill, environment
Management: Facilitation



Strategy to improve performance & output



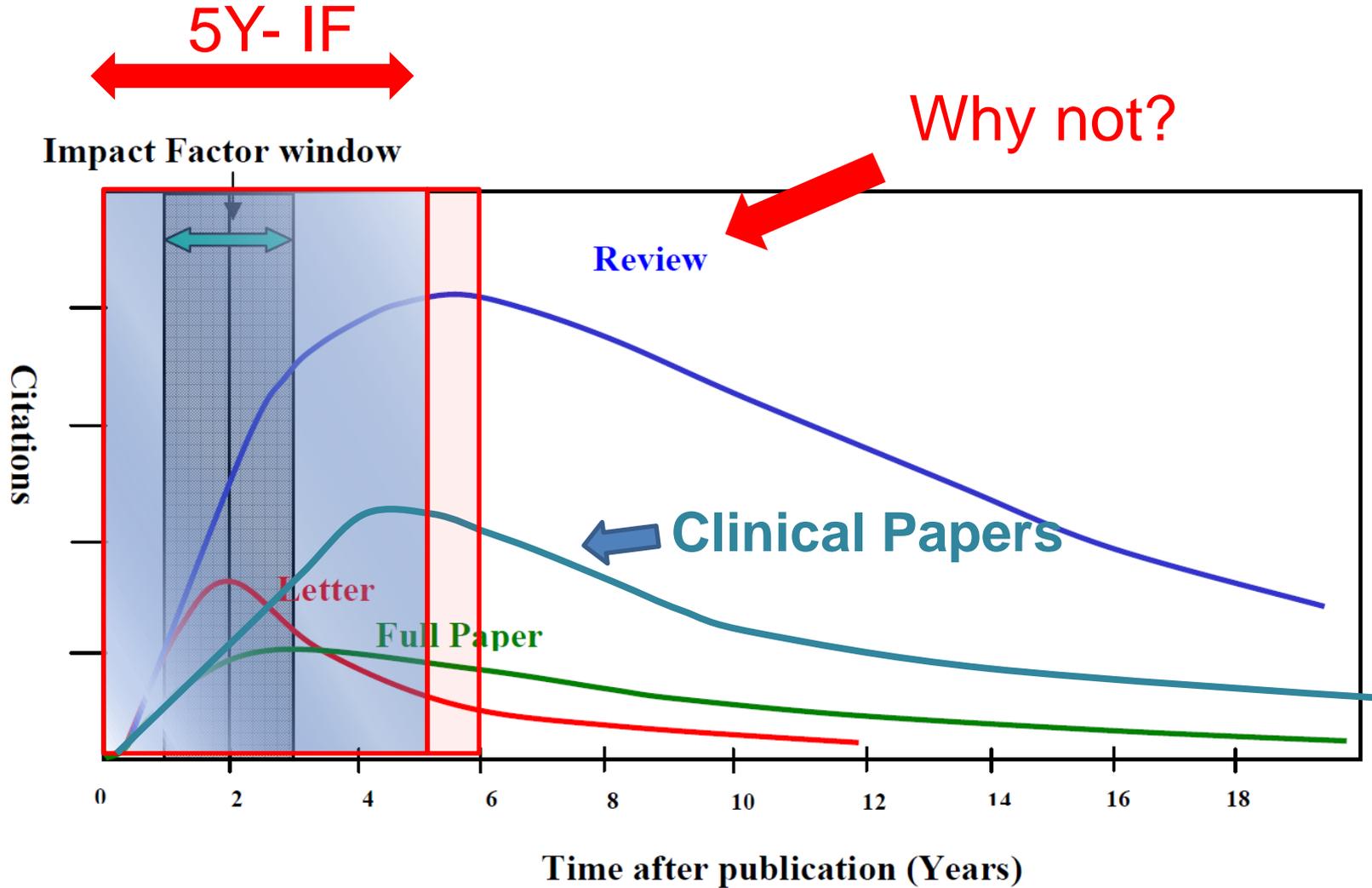
Citation: IF & Discipline



Life Sc > Natural Sc > Engineer > Social Sc

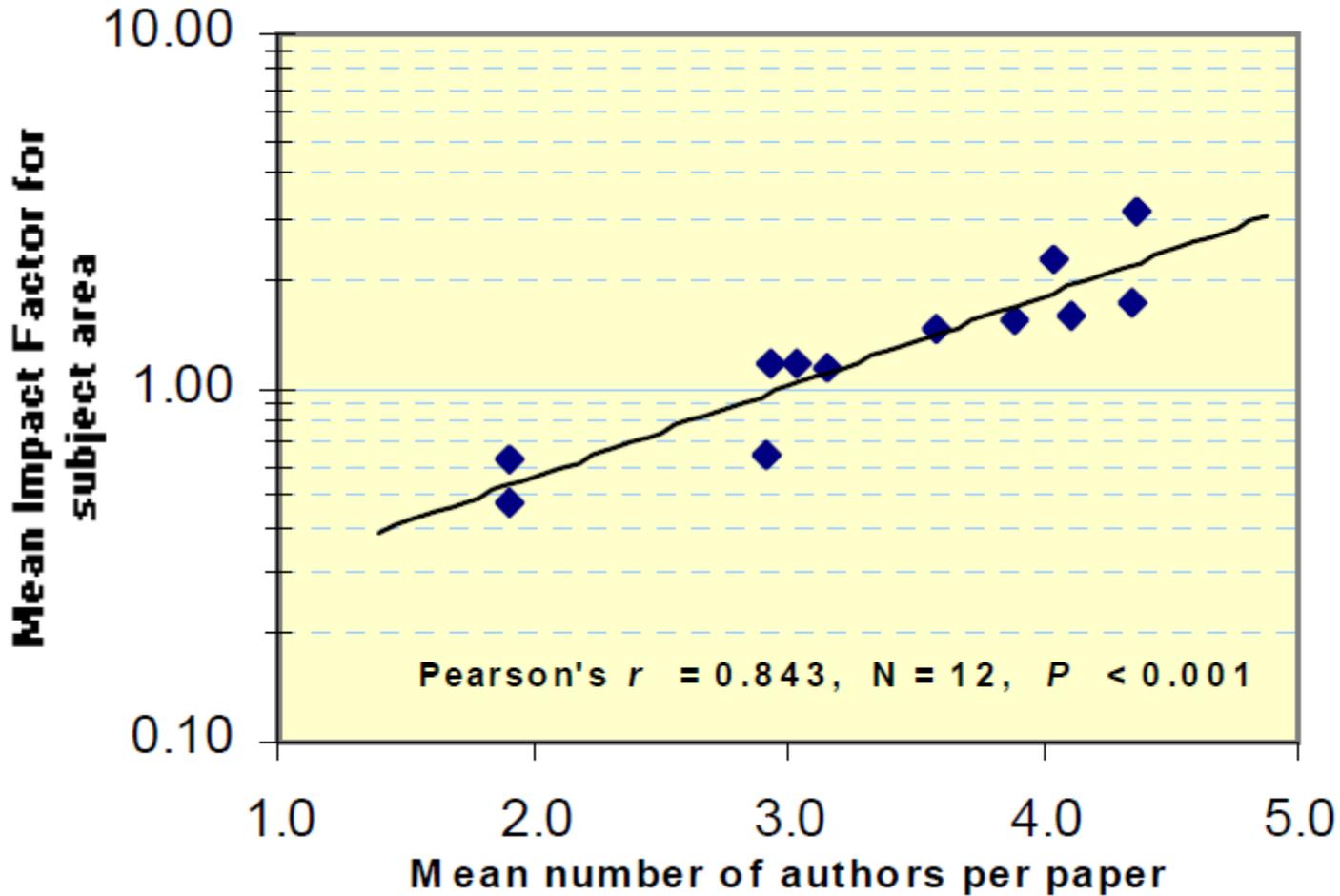


Citation: IF & Article Type





Citation: IF & No. of Authors





Citation: Collaborations



42.5%	International collaboration	3,689 publications (42.5%) were co-authored with Institutions in other countries Citations per Publication: 9.0
19.7%	National collaboration	1,713 publications (19.7%) were co-authored with other Institutions in Thailand, but not with Institutions in other countries Citations per Publication: 3.6
34.6%	Institutional collaboration	3,005 publications (34.6%) were co-authored with others at Mahidol University, but not with other Institutions Citations per Publication: 2.5
3.1%	Single authorship	271 publications (3.1%) were not co-authored but had a single author Citations per Publication: 2.9

Academic-Corporate Collaboration

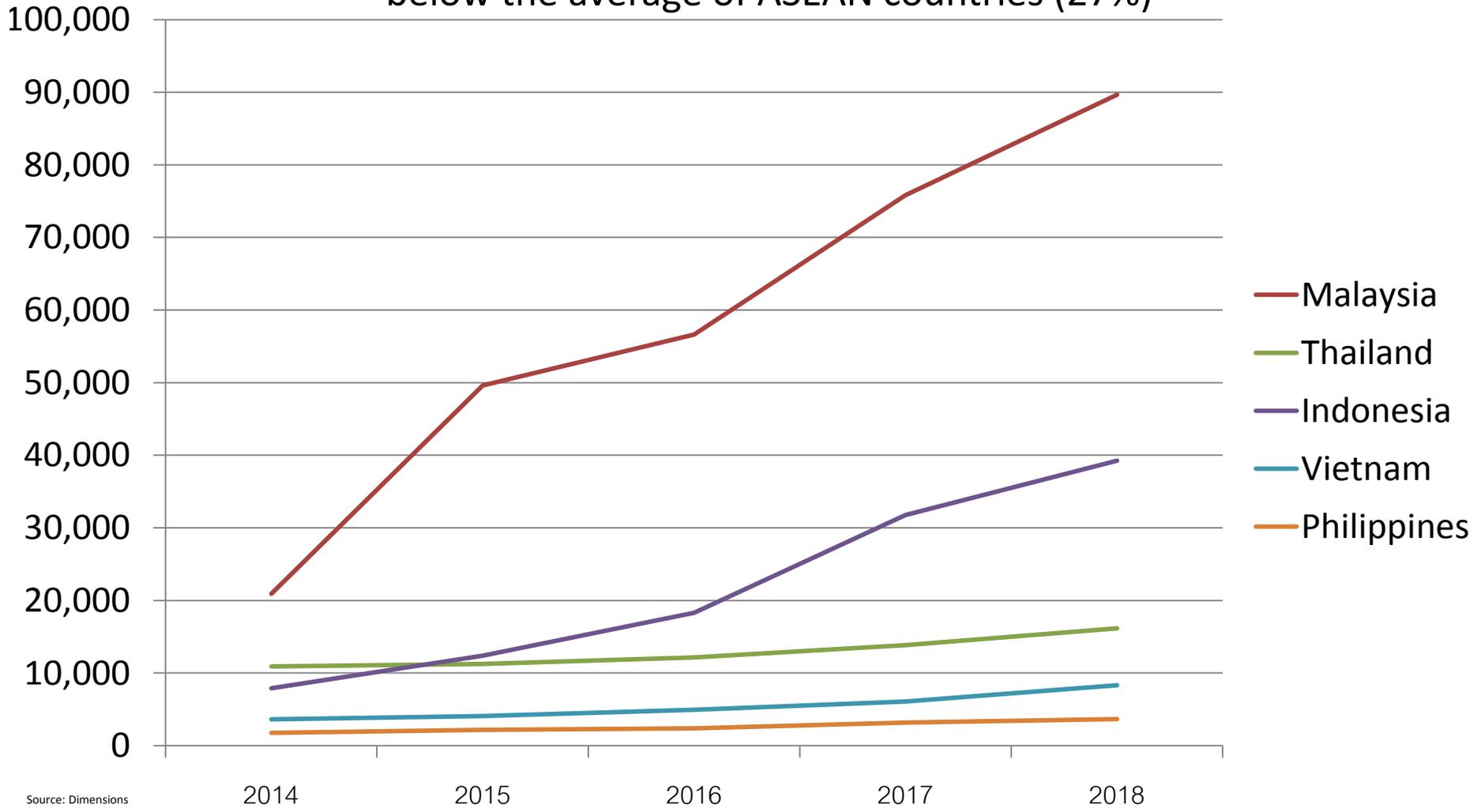


1.5%	Academic-corporate collaboration	130 publications (1.5%) had one or more authors with both academic and corporate affiliation Citations per Publication: 26.4
98.5%	No academic-corporate collaboration	8,548 publications (98.5%) did not have authors with both academic and corporate affiliation Citations per Publication: 5.2



ผลงานด้านการวิจัย

Thailand: Article output grows 8% (CAGR), which is below the average of ASEAN countries (27%)



Source: Dimensions



Thailand: Mahidol University is the top publishing institution

Rank	Institution	Articles 2014-2018
1	Mahidol University	10,232
2	Chulalongkorn University	8,828
3	Chiang Mai University	5,072
4	Khon Kaen University	4,097
5	Prince of Songkla University	3,425
6	Kasetsart University	3,265
7	National Science & Technology Development Agency - Thailand	2,377
8	Thammasat University	2,014
9	King Mongkuts University of Technology Thonburi	1,841
10	Suranaree University of Technology	1,408



To be 1 in 100 World Class University in 2030

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Mahidol
Wisdom of the Land



University Ranking 2019

World University Rankings 2019 | Asia University Rankings 2019

601-800	Mahidol University Thailand	104	Mahidol University Thailand
801-1000	Chiang Mai University Thailand	=176	Chulalongkorn University Thailand
801-1000	Chulalongkorn University Thailand	201-250	King Mongkut's University of Technology Thonburi Thailand
801-1000	King Mongkut's University of Technology Thonburi Thailand	201-250	Suranaree University of Technology Thailand
801-1000	Chiang Mai University Thailand	251-300	Chiang Mai University Thailand

Scimago Institutions Rankings 2019
Mahidol University is Ranked **No. 1 in Thailand**
(ใช้ข้อมูลการวิจัยอันดับจากฐานข้อมูล Scopus และใช้ข้อมูลจาก PATSTAT Database
ประเมินผลการจัดอันดับด้วยตัวชี้วัดด้าน Innovation)

Overall Ranking
1. Mahidol University

Innovation Ranking
1. Mahidol University

Asiatic Region Ranking
1. Mahidol University

QS WORLD UNIVERSITY RANKINGS

2020 University search

- 24 Chulalongkorn University
- 66 Mahidol University
- Chiang Mai University
- Thammasat University
- Kasetsart University
- Khon Kaen University
- King Mongkut's University of Technology Thonburi
- Prince of Songkla University

Mahidol University is ranked no. 1 in Thailand

Ranked No.	University
1.	Mahidol University
2.	Chulalongkorn University
3.	Chiang Mai University
4.	Khon Kaen University
5.	Prince Songkla University
6.	Kasetsart University

2019 CWTS Meaningful metrics Leiden Ranking
Mahidol University
Wisdom of the Land

NTU RANKING

Performance Ranking of Scientific Papers for World Universities

Country Rank	Name	World Rank
1	Mahidol University	493
---	Chulalongkorn University	501-550

2019 University search

- 271 Chulalongkorn University
- 380 Mahidol University
- Thammasat University



To be 1 in 100 World Class University in 2030

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Home >> ARWU 2019

2019 2018 2017 2016 2015 2014 2013 2012 2011 2010 2009 2008 2007 2006 2005 2004 2003

Academic Ranking of World Universities 2019

Top 1000 Methodology Statistics

World Rank	Institution*	By location
		Thailand ▾
401-500	Mahidol University ←	
601-700	Chulalongkorn University	
801-900	Chiang Mai University	
801-900	Prince of Songkla University	

ARWU World Top 500 Candidates 2018

Top 500 501-1000 Methodology Statistics

World Rank	Institution*
501-600	Chulalongkorn University
501-600	Mahidol University
701-800	Prince of Songkla University
801-900	Chiang Mai University

Criterion	Indicator	Code	Weighting
Quality of education	• Alumni as Nobel laureates & Fields Medalists	Alumni	• 10%
Quality of faculty	• Staff as Nobel Laureates & Fields Medalists • Highly cited researchers in 21 broad subject categories	Award HiCi	• 20% • 20%
Research output	• Papers published in <i>Nature</i> and <i>Science</i> ^[* 1] • Papers indexed in Science Citation Index-expanded and Social Science Citation Index	N&S PUB	• 20% • 20%
Per capita performance	• Per capita academic performance of an institution	PCP	• 10%



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จุฬาลงกรณ์
มหาวิทยาลัย
CHULALONGKORN UNIVERSITY

