## 打造頂尖夢幻團隊 Building the Iron Triangle: Connecting Libraries, R&D and Faculty

CONCERT 2017 年國際學術研討會

Yelena Parada-Rajmankina Associate Director, Research Projects



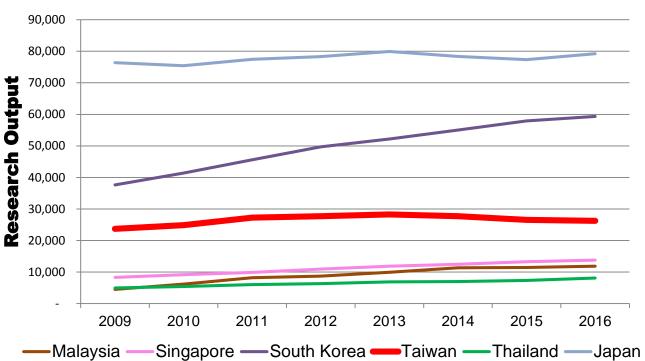


## MOST 5 year strategy: nurturing talent and developing a S&T ecosystem





## **Growth in Published Research Outputs by Country 2009-2016**

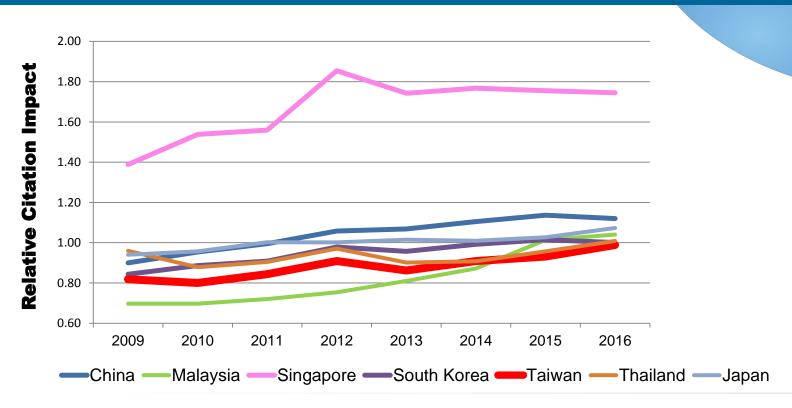


Country	Growth Rate (CAGR)	
China	14.0%	
Malaysia	14.9%	
Singapore	7.5%	
South Korea	6.7%	
Taiwan	1.5%	
Thailand	7.4%	
Japan	0.5%	
World Totals	4.1%	

WILEY

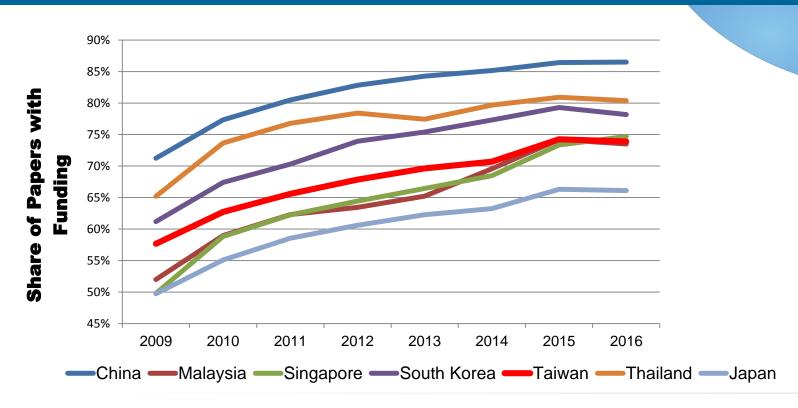
Source: Web of Science

## Relative Citation Impact 2009-2016





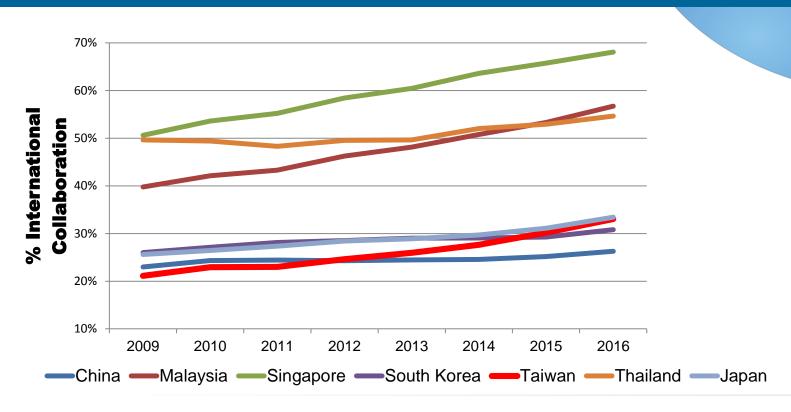
## **Research Funding Trends 2009-2016**





Source: Web of Science

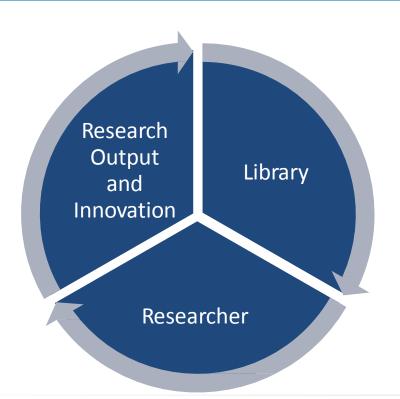
## **International Collaboration Trends 2009-2016**





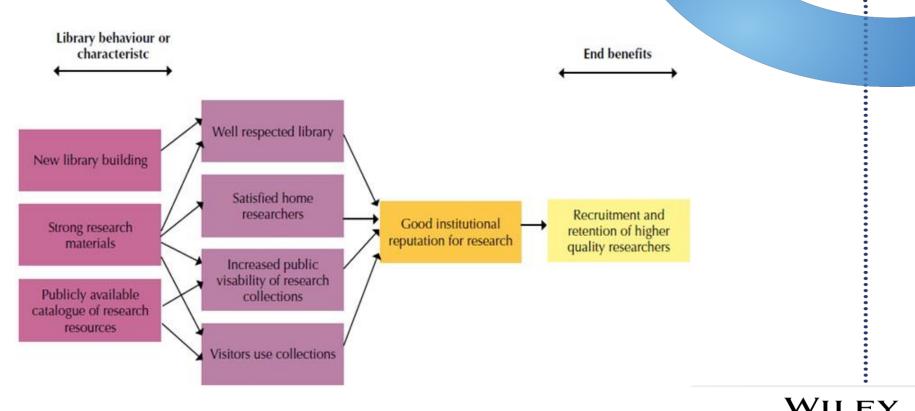
Source: Web of Science

## **Connecting Libraries, R&D and Researchers**





### Libraries can help attract and retain top researchers



Source: The value of libraries for research and researchers, RIN and RLUK report, March 2011

### **Quality Matters**

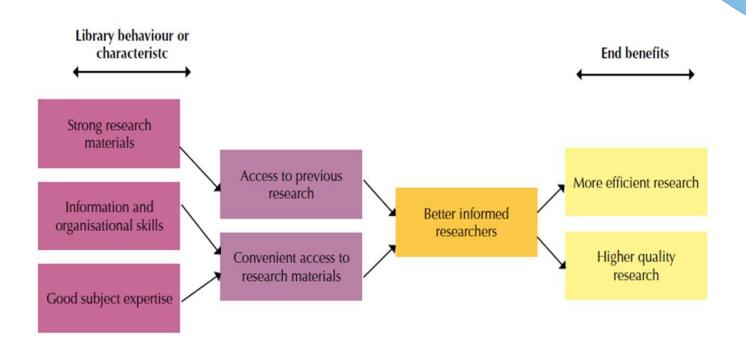
The library's research collections can be a selling point for an institution, drawing international students, and influencing researchers when deciding to apply for or accept a post.

- Quality
- Nature
- Comprehensiveness





## Convenient access to high-quality research content remains a key foundation for good research





### Super - Users = Super - Producers

The evidence suggests a link between e-journal consumption and research outcomes:

#### **CIBER Institutional Indicators**

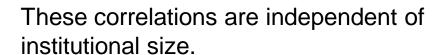
	Moderate users (n=80)	High users (n=25)	Super users (n=10)
Research papers per academic	0.4	0.8	1.0
Research grants and contracts per academic (£000's)	12.7	29.0	39.7
PhD awards per 100 academics	9.1	17.5	17.4
Cost per download	£0.89	£0.74	£0.60



## More spending on e-journals mean more use and better research

Per capita **expenditure** and use of e-journals is **strongly and positively correlated** with:

- papers published
- numbers of PhD awards,
- research grants and contracts income





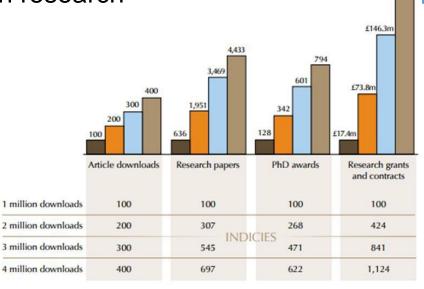


## Use and outcomes: Understanding the value of e-journals in terms of successful research

A doubling in downloads (from 1 to 2M), is statistically associated with dramatic increases in research productivity:

- papers (207%)
- PhD awards (168%)
- research grants and contract income (324%)

The gearing becomes even stronger as the volume of downloads increases.





£195.6m

# Ambition to improve research outputs meets with real challenges



### **Key challenges for researchers**





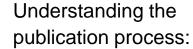


Where to publish? Predatory journals



Ethics (e.g. plagiarism)





- Peer review
- Open Access, Open Data



## Key challenges

"There are so many rules for different journals. It's not clear why my papers get rejected."

India

"I don't know how I find the right journal for my paper."

Philippines

"I find it challenging to write in English"

China

"The most challenging part Is writing a good abstract and TOC"

"How do I write in the catch the eye of a re

"I'd like to know how present my findings so to Editors."

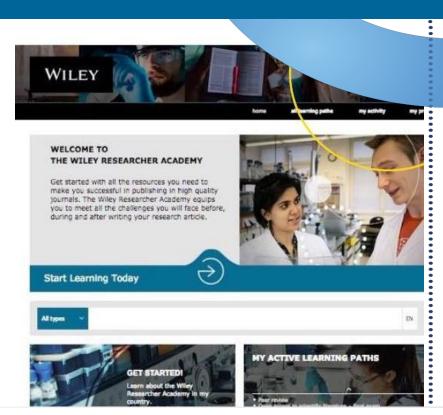
37%

Of authors don't know how to communicate their results effectively



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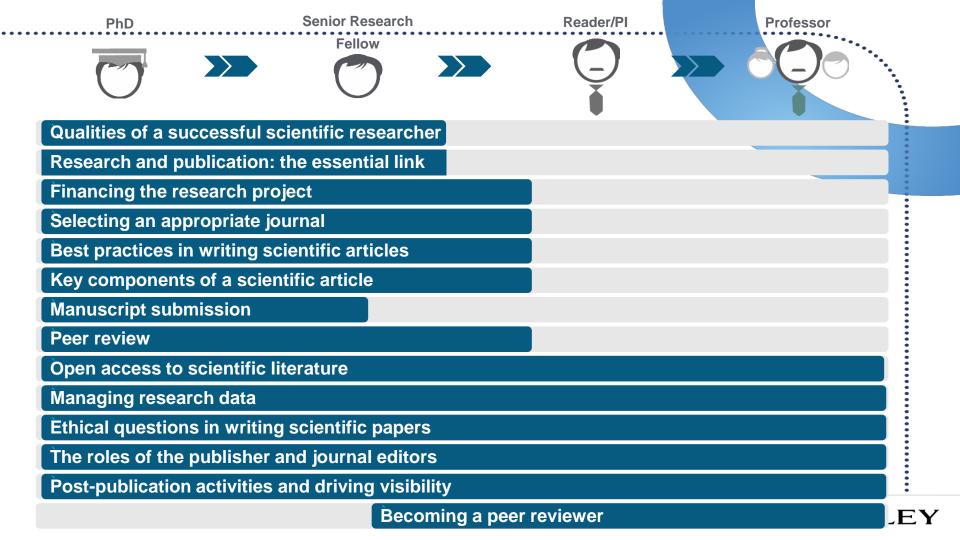
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Deputy Director,
EMBO



Dr Samuel Caddick

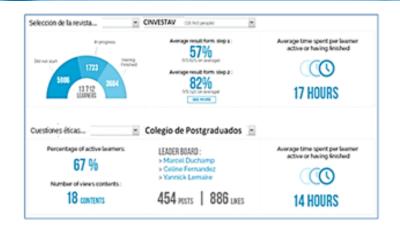
EMBO Lab

Management Training



### **Effective measurement and reporting**

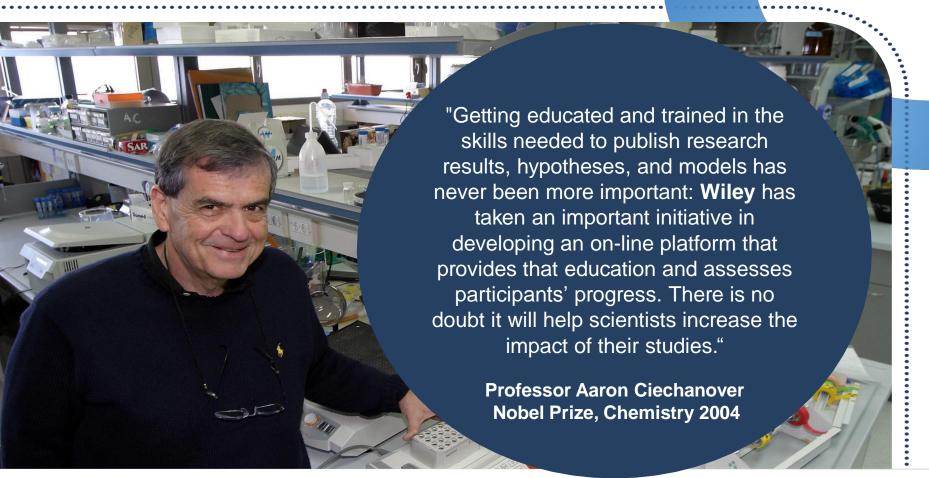








- Dashboards and configurable reports
- Monitor usage and learning benefits by institution, level of study, discipline, etc.
- Insight into researchers' strengths and weaknesses



## The key role of libraries in improving research outcomes



Quality sources

Convenient access

Skills Development Increase in the quantity and quality of research outputs

