



Web of  
Science  
Group



# Workshop 2: Quality and Performance in Scientific Research

Dr. Ayman Akil (Head of Professional Services Research and Academia)

Dr. Nicolas Teeny (Senior Consultant in Research and Academia)

Iulian Herciu (Advisory Services Consultant, Research and Education)

# Presenters



**Dr. Ayman Akil**  
Head of Professional Services  
Research & Academia - MENA  
Clarivate

Former researcher at Max Planck Institute with more than 12 years of experience in research management, assessment and planning, university ranking, R&D projects.

As a researcher, Dr. Akil works closely with universities and research entities helping them at assessing their performance using sophisticated bibliometric indicators and methods. In addition to this, Dr. Akil works with industrial companies to offer Knowledge-based solutions and has notable experience in quantum optics, ultrafast dynamics down to Attosecond resolutions, spectroscopy methods and muon-spin rotation measurements. He has published many articles in journals of high repute.

**Public profile:** <https://linkedin.com/in/ayman-akil-phd-b10446127/>



**Dr. Nicolas Teeny**  
Senior Consultant in Research  
and Academics - MENA  
Clarivate

Former researcher at Max Planck Institute with more than 7 years of experience in research management, assessment and planning, R&D projects and strategic planning. Additionally, Dr. Teeny has 3 years of experience in forming strategies of international leading companies in diverse industries at the intersection of business and technology.

He works closely with universities and research institutes helping them at assessing and evaluating their performance using sophisticated bibliometric indicators and methods. Dr. Teeny has notable experience in atomic physics, quantum dynamics, laser-electron interactions and solid state physics. He has published eight articles in highly reputable scientific journals.

**Public Profile:** [www.linkedin.com/in/nicolas-teeny](http://www.linkedin.com/in/nicolas-teeny)



**Mr. Iulian Herciu**  
Advisory Services Consultant,  
Research and Education- MENA  
Clarivate

Mr. Iulian Herciu has more than 15 years of activity in scientific information industry. He has worked with all levels of stakeholders involved in research and scientific information dissemination.

During his career he had interacted with all major international scientific publishers. This allowed him to have an overview of collaboration opportunities available and different ways in which they can be capitalized by scientific universities.

This holistic experience was extremely useful on his current role at Clarivate Analytics. His main objective is to support universities and researchers in getting a better understanding of current scientific and R&D landscape.

**Public Profile:** [www.linkedin.com/in/iulianherciu](http://www.linkedin.com/in/iulianherciu)

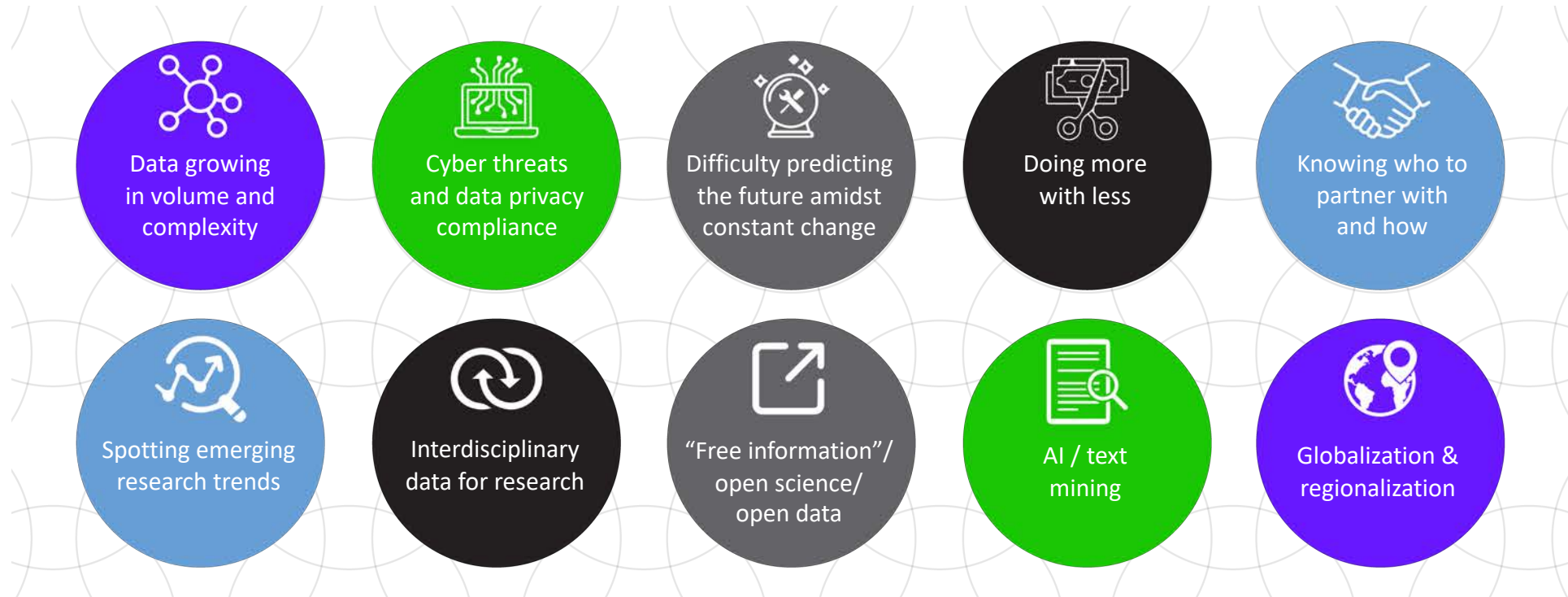
# Agenda

1	About Clarivate
2	Introduction: what is quality?
3	Research Methodology
4	Quality in Research in the perspective of Editors
5	Quality in Research in the perspective of Governments & Funders
6	Quality in Research for Researchers, Research Managers & Decision Makers

# About Clarivate



# Innovators today face major challenges and opportunities







# Clarivate tools along innovation and research lifecycle



**Web of Science**

Scientific and  
Academic Research



**Derwent**

Patent Research,  
Intelligence and Services



**Techstreet**

Industry Codes  
and Standards



**Cortellis**

Life Sciences  
Intelligence and Analytics



**CompuMark**

Trademark Research  
and Protection



**MarkMonitor**

Domain and Brand  
Protection



**IP Management  
Solutions**

Intellectual Property  
Management

# Our partners

## Academic Institutions



## Commercial Enterprises



## Governments



**49** *of the* **top 50**  
pharma companies use Cortellis

**More than half**  
of Fortune 100 uses MarkMonitor

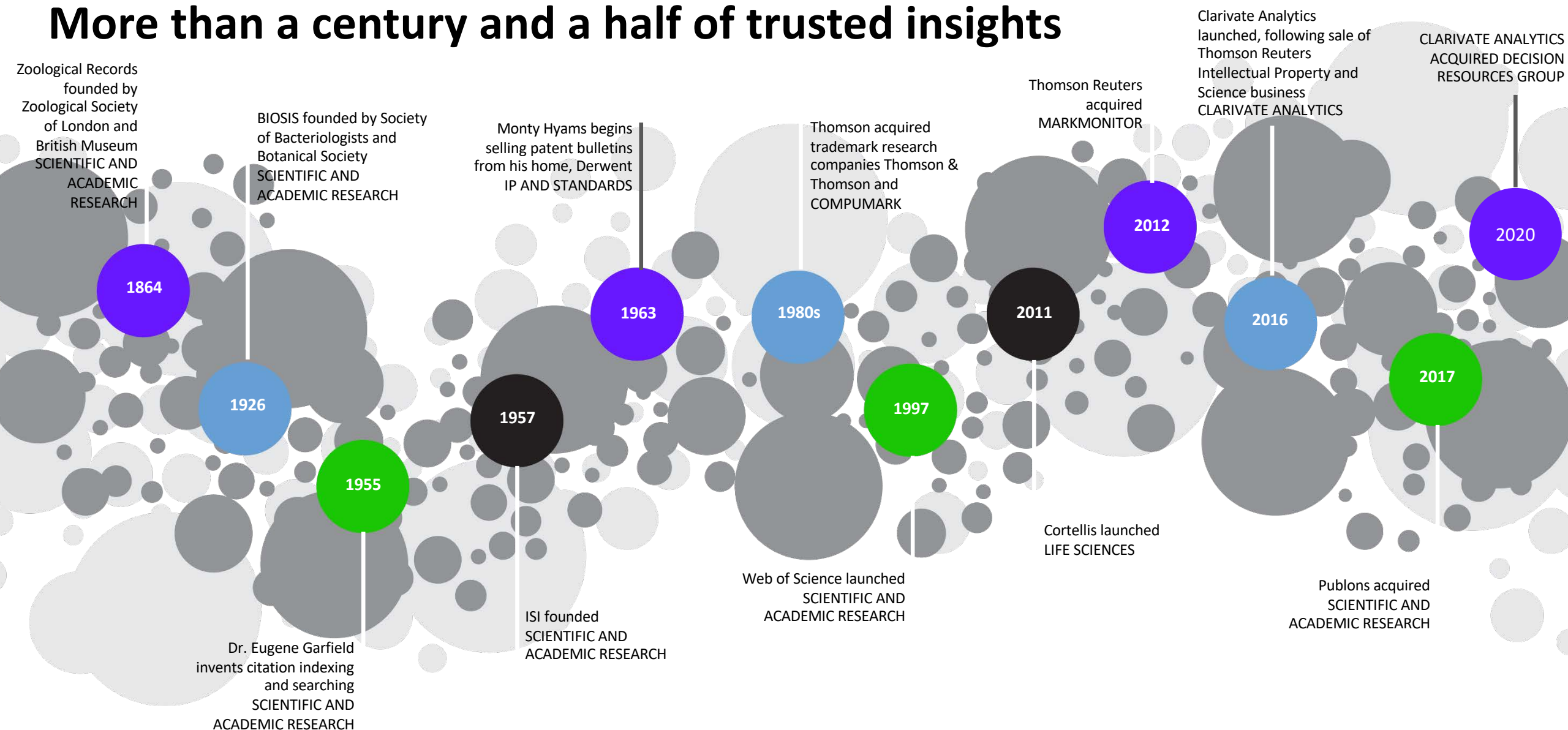
**9 in 10**  
of the world's most valuable brands use  
CompuMark

**40+**  
Patent issuing authorities worldwide use  
Derwent World Patents Index

**1 billion**  
cited references are accessible through  
Web of Science



# More than a century and a half of trusted insights



# Governmental partnerships

## Egypt EKB



## UK REF 2021

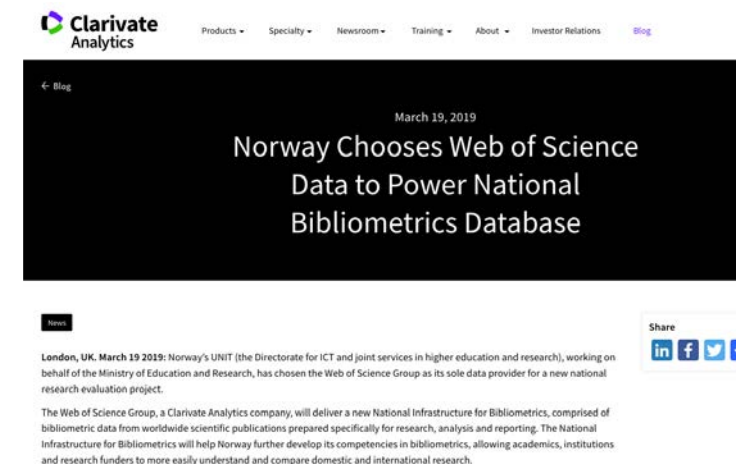


This information includes data about the number of times a scholarly publication has been cited in other scholarly publications – called citation counts. Eleven of REF 2021's 34 expert panels have said they plan to use citation data to inform the peer review process during the assessment phase of REF 2021.

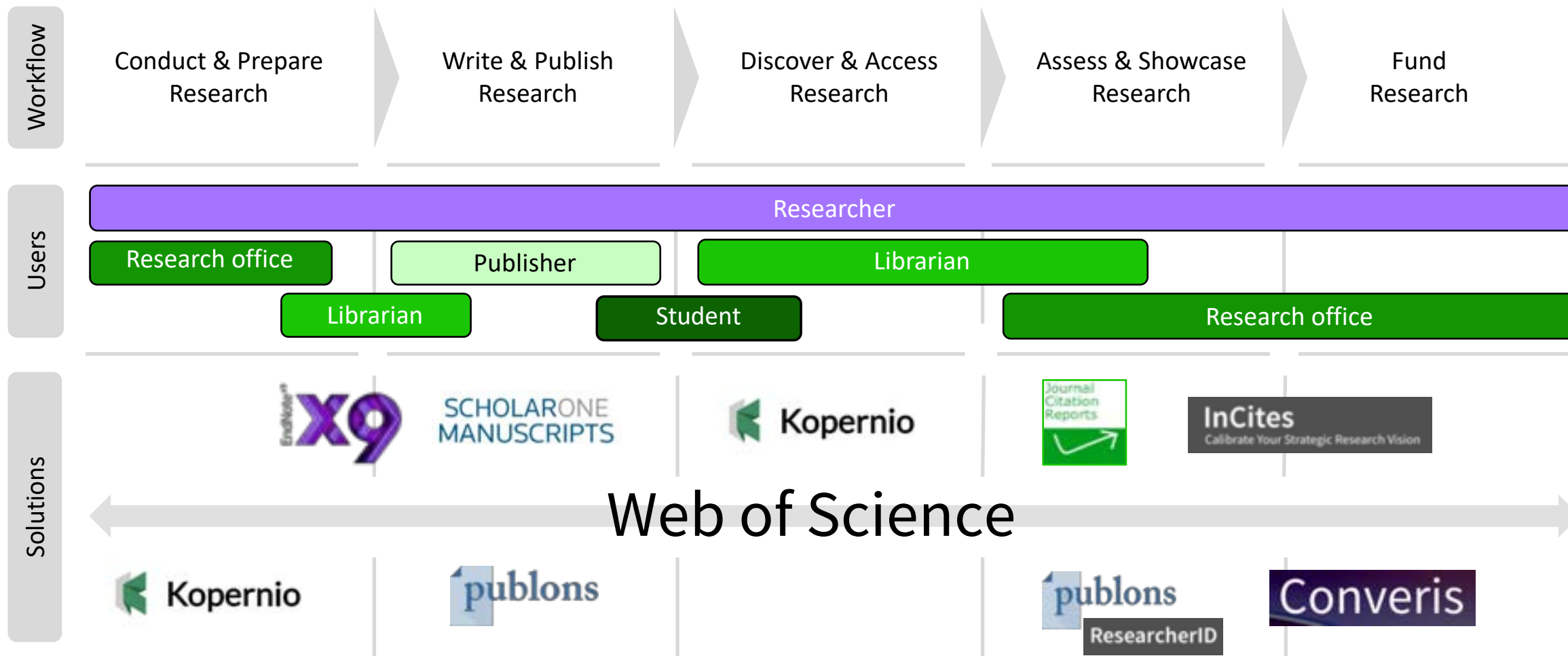
## Ministry of Research, Technology and Higher Education of Indonesia (RISTEKDIKTI)



## Directorate for ICT



# The Web of Science Group supports the entire research workflow





# Introduction



# What is quality?



**British Standard Institution**

The totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

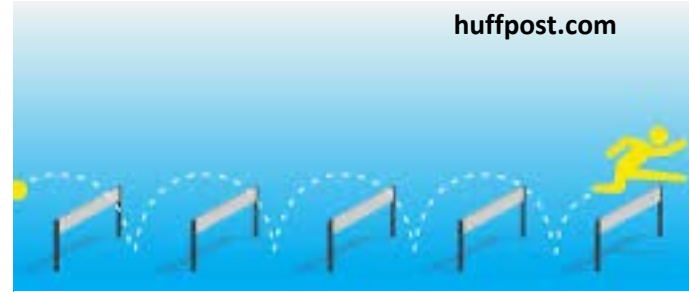


# What is quality?

Five approaches to defines quality



Exceptional



Consistency



Fitness for purpose



Transformative



Value for money

# What is quality?



“The search for a universal definition of quality and a statement of law like relationship has been unsuccessful”

Reeves, C. A. and Bedner, D.A. (1994). Defining quality: Alternatives and implications, Academy of Management Review, 19(3), 419-45.

## Five groups of quality definitions

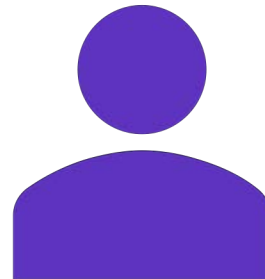
## Transcendent definitions

## Manufacturing-based definitions

managementevents.com

## Product-based definitions

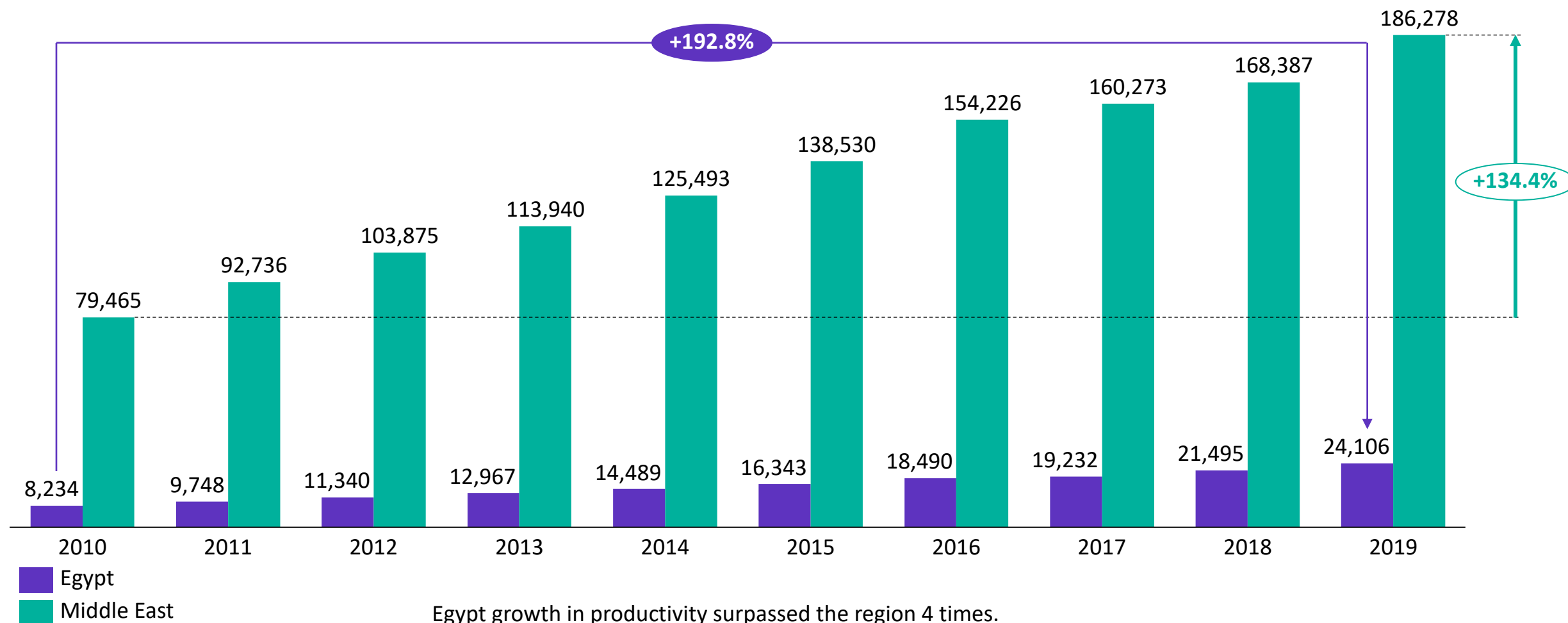
## User-based definitions



## Value-based definitions

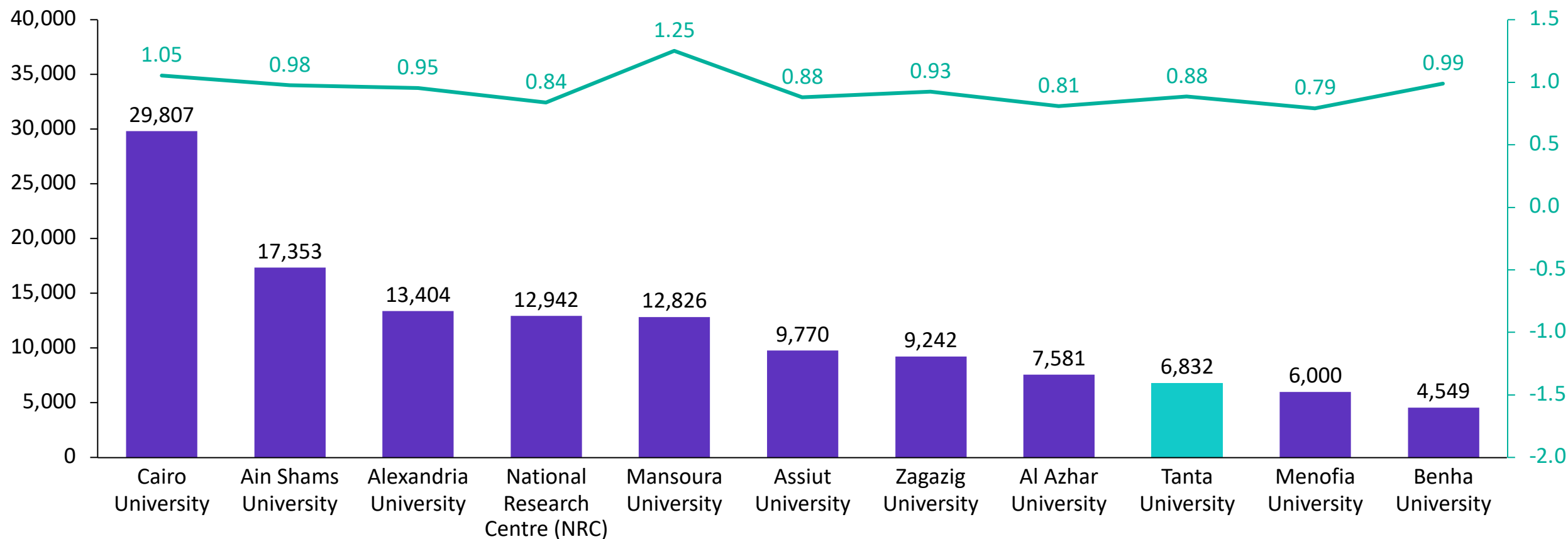
# Web of Science documents

Number of Web of Science Documents 2010-2019



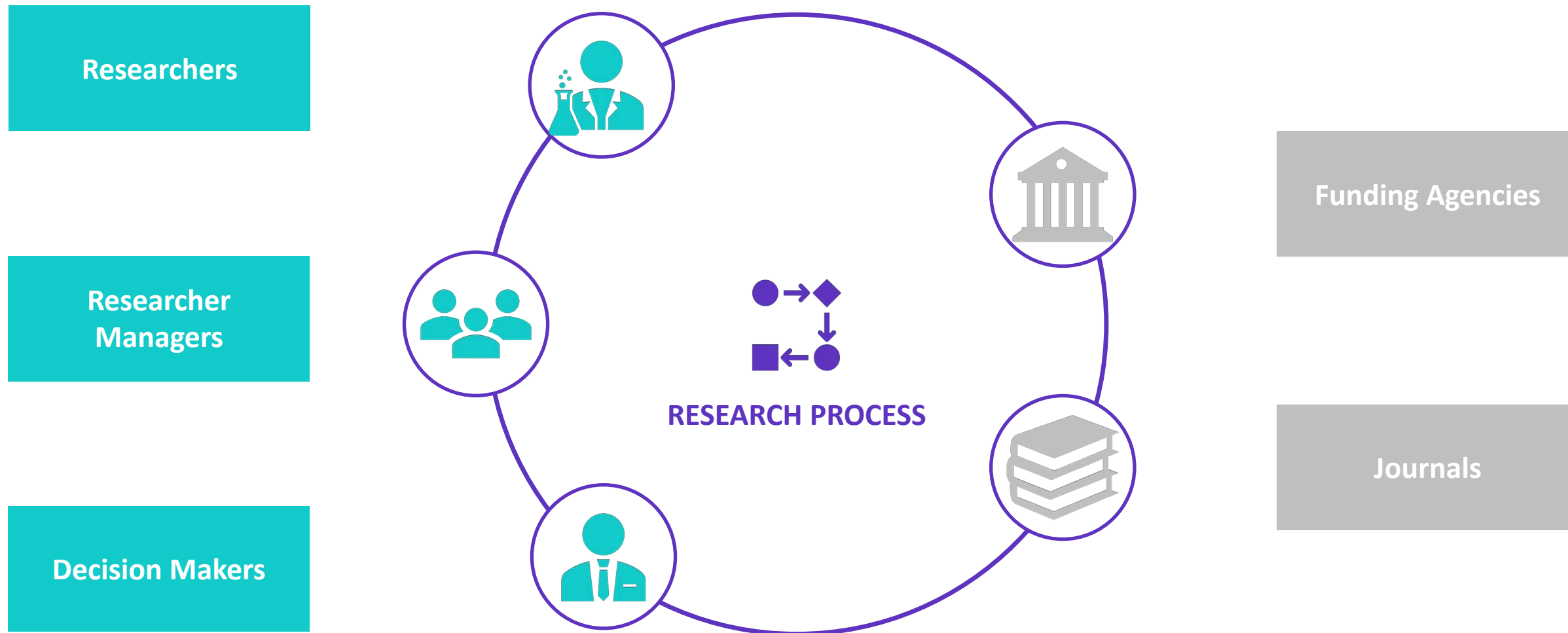
# Web of Science documents

Egypt top Universities All Areas 2010-2019





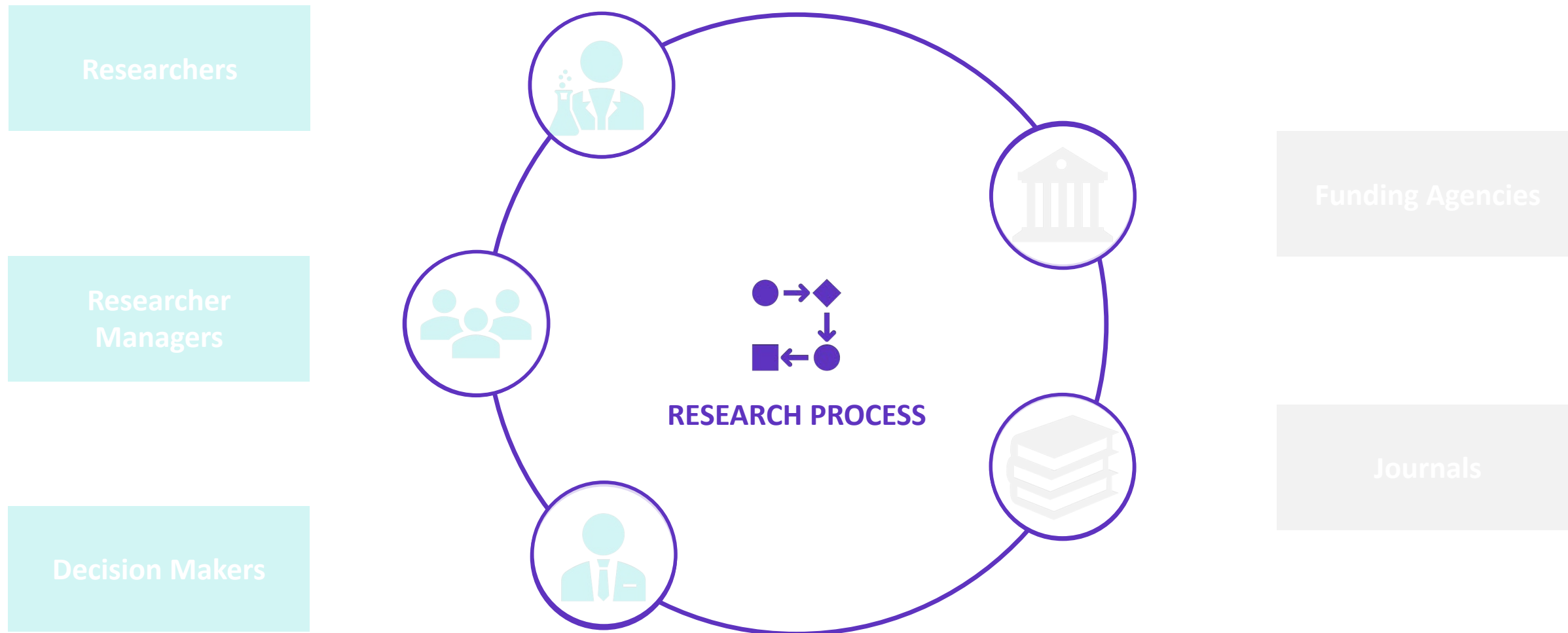
# Research Process and Stakeholders



# Research Methodology

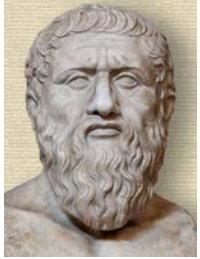


# Research Process and Stakeholders



# Brief History of the Scientific Method

From Aristotle till today: what have changed in the scientific method



Plato

The Platonic way of knowledge emphasized reasoning as a method, **DOWNPLAYING** the importance of observation



Hasan Ibn al-Haytham

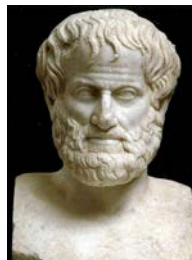
**EXPERIMENTATION** as a mode of proving the basic hypothesis or premise

347  
B.C.E

322  
B.C.E

1040

Aristotle



Earliest systematic treatise on the nature of scientific inquiry, one which embraced **OBSERVATION** and **REASONING** about the **NATURAL WORLD**

# Brief History of the Scientific Method

From Aristotle till today: what have changed in the scientific method



Francis Bacon

**METHODICAL COLLECTION OF DATA**  
and observations, coupled with  
**CORRECTION OF SYSTEMATIC**  
**ERRORS** to which observers are prone

1620

1727

Sir Isaac Newton



The **IMPLICIT METHOD OF THE EXPERIMENTS**  
and reasoning, and the explicit methodological  
rules given as the **RULES FOR PHILOSOPHISING**  
in Book III of the Principia Mathematica



William Whewell

Scientists work to come up with  
hypotheses from which true  
observational consequences can be  
deduced: knowledge is the product of the  
**OBJECTIVE** and the **SUBJECTIVE**

1866



# Brief History of the Scientific Method

From Aristotle till today: what have changed in the scientific method



Quantum and  
Relativity

**CERTAINTY OF KNOWLEDGE** about the natural world was recognized as **UNATTAINABLE**, which rendered science fallible but at the same time rationally justified

1900

1940

Now

**HOW SCIENTISTS CAN ADHERE TO THE SCIENTIFIC METHOD AND BEST PRACTICE?**

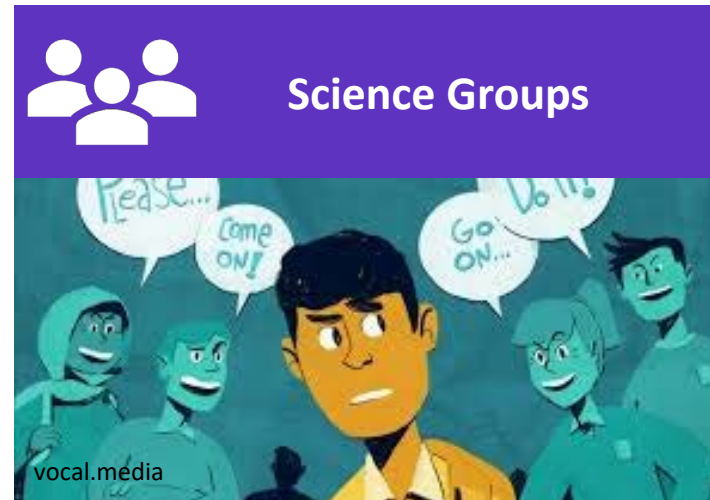
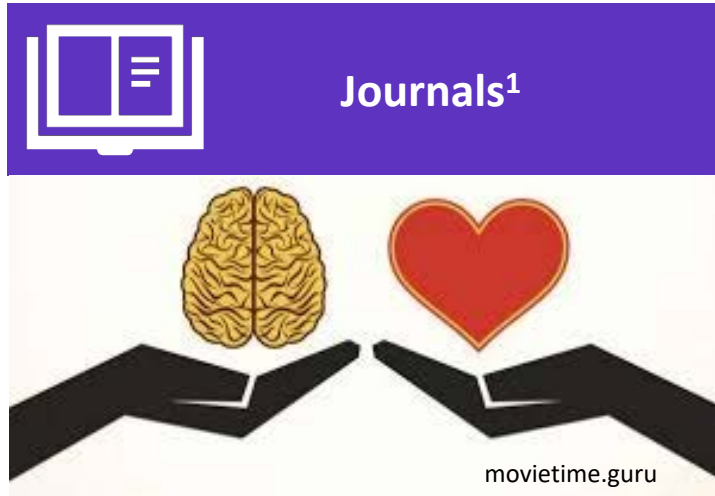
Statistics



Developments in the theory of statistics have had a direct and immense influence on the experimental method (**MEASURING UNCERTAINTY**): a hypothesis should be rejected by evidence if this evidence would be unlikely relative to other possible outcomes

# Why scientists need to adhere to the scientific method?

Preaching the preacher?



# The scientific method checklist

Selecting a problem

Designing  
a study

Collecting  
data

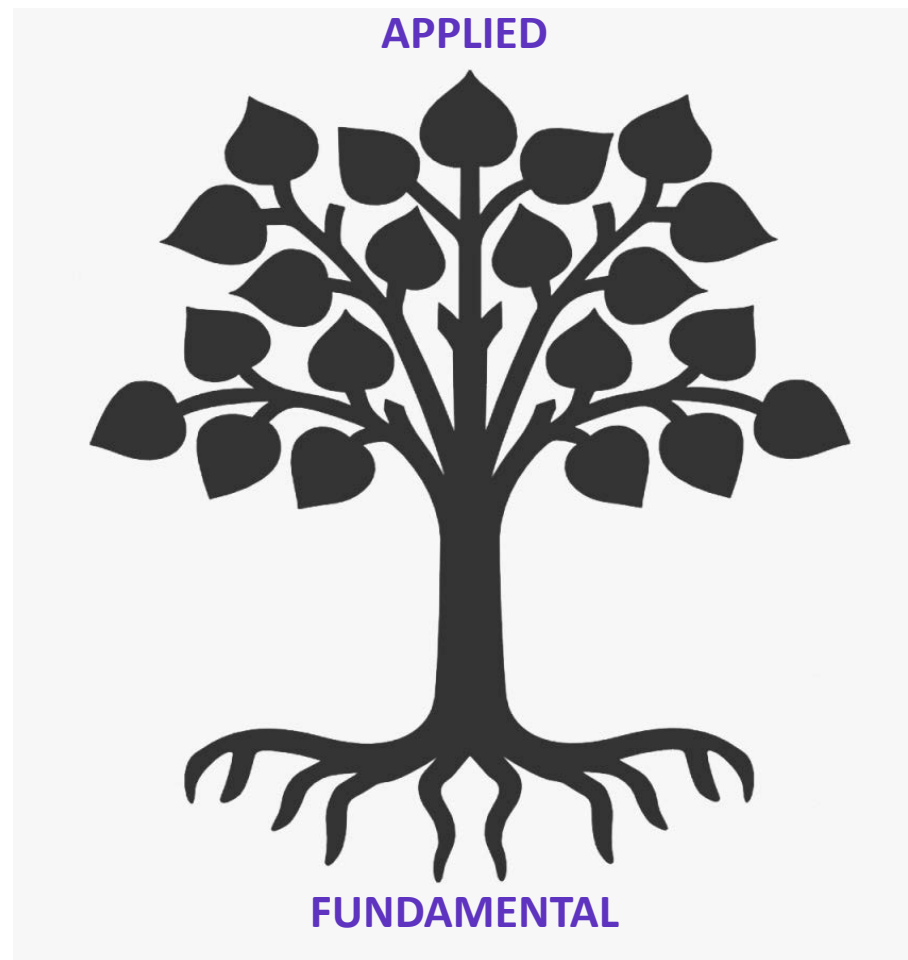
Analyzing  
data

Publication



# Selecting a problem

Seek an important problem; what is the value of solving this problem?



# Selecting a problem

Seek an important problem; what is the value of solving this problem?

## Fundamental / Basic

- Driven by curiosity and with the goal of expanding knowledge & understanding nature
- Foundation of all progress

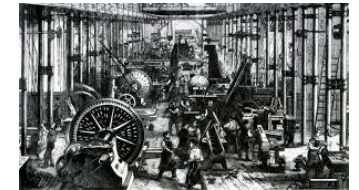


## Guiding Question

- How solving this problem would enrich the human understanding of a certain subject?



## Example



Newton's law of gravity



# Selecting a problem

Seek an important problem; what is the value of solving this problem?

## Applied

- solve a practical problem
- improve human condition



## Guiding Question

- How solving this problem would be useful for others (humanity, community,...)



## Examples



# Selecting a problem

Define the problem; understand it thoroughly

Context



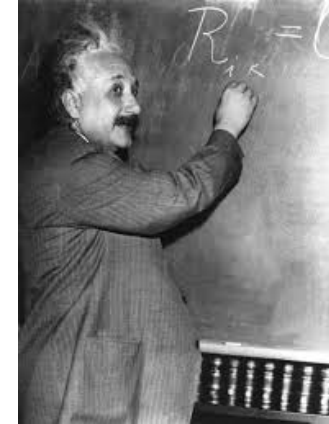
Precise issue



Relevance



Aims



# The scientific method checklist

Selecting a problem

Designing  
a study

Collecting  
data

Analyzing  
data

Publication



# Designing a study

Expand your knowledge; reuse not re-invent



# Designing a study

Expand your knowledge; Read and when your done read more

Read

Read more

Really read more

The world  
does not need  
more brilliant  
ideas, it needs  
**BRAND NEW  
BRILLIANT  
IDEAS**



# Designing a study

Expand your knowledge; what to read tips

Search Engine



Journal



Leading Scientists



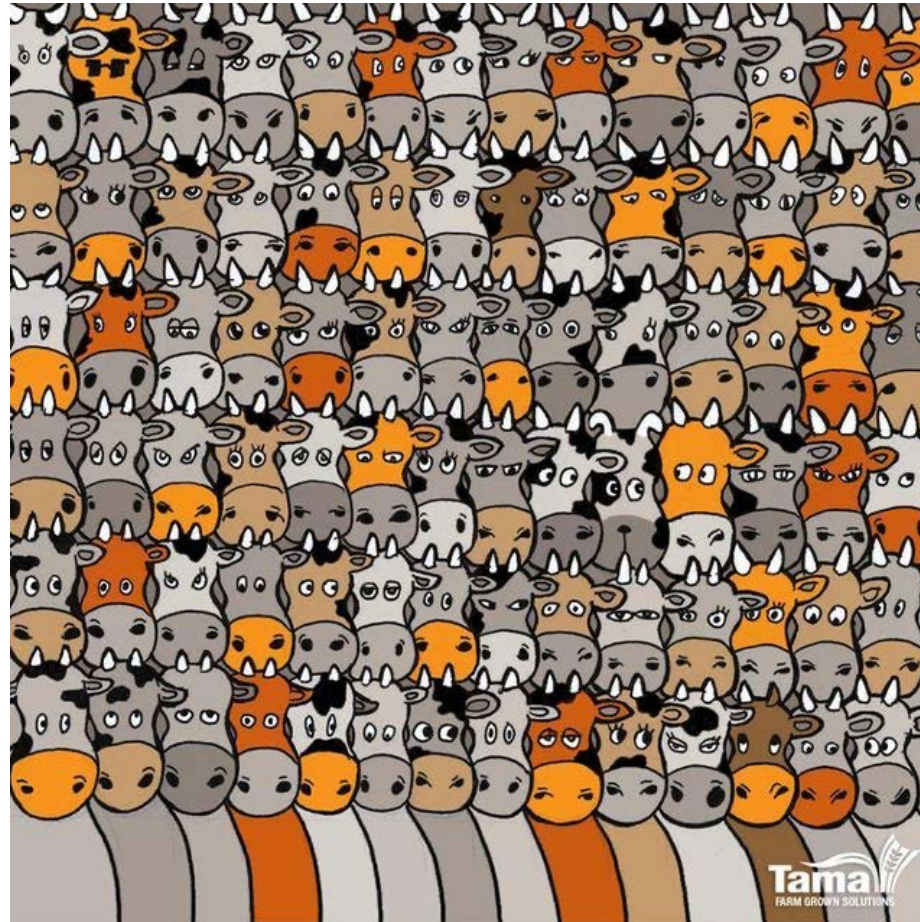
Other Scientists



# Designing a study

Build a multiple reasonable hypothesis; you cannot find something you are not searching for

Where is the dog?



# Designing a study

Build a multiple reasonable hypothesis; you cannot find something you are not searching for



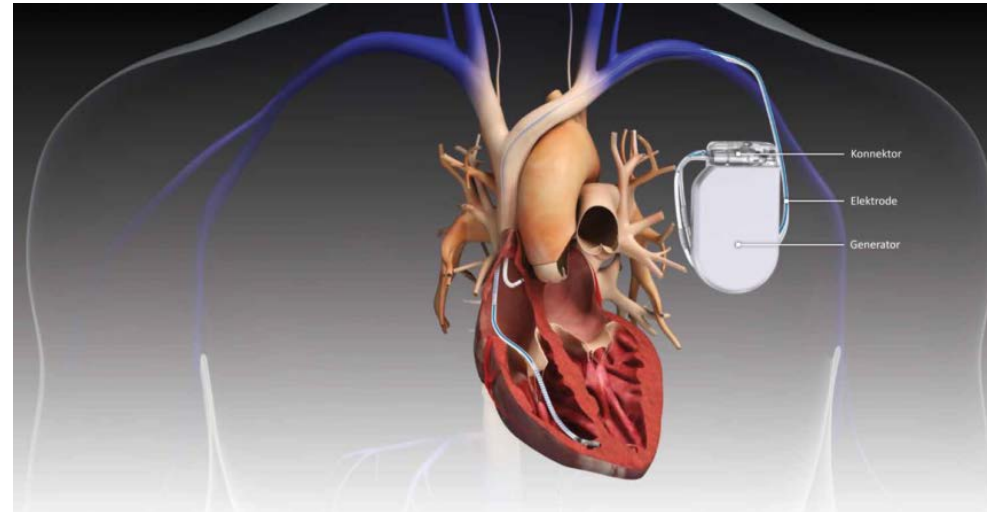
Constantine Fahlberg





# Designing a study

Build a multiple reasonable hypothesis; you cannot find something you are not searching for



Accidental discoveries against **75,000,000** records derived  
by focusing on hypothesis

# Designing a study

Build a multiple reasonable hypotheses



Status quo



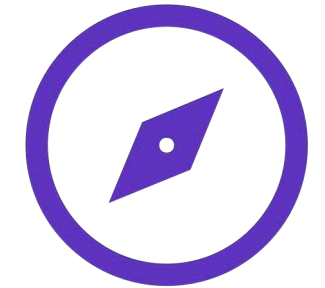
Consult others



Your solutions



Validity



**Your hypothesis is your NorthStar and determines which data and parameters are relevant for your study**



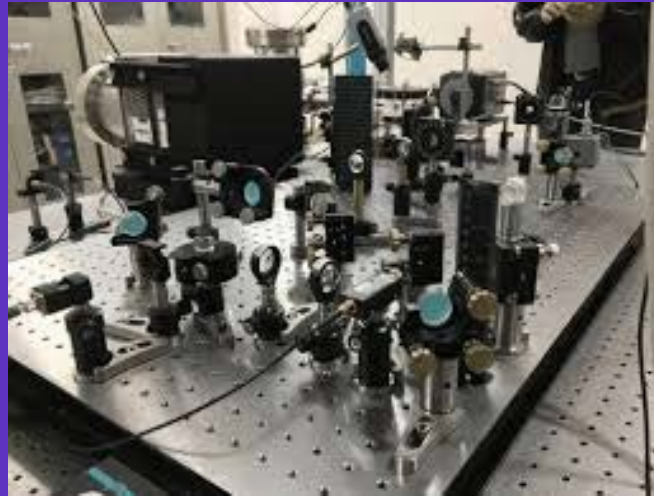
# Designing a study

Design an experiment that test your hypothesis

Independent variable

Dependent variable

Experiment



True Hypothesis

False Hypothesis

YOUR EXPERIMENT DESIGN SHOULD BE ABLE TO TEST YOUR HYPOTHESIS!

# Designing a study

Design an experiment that test your hypothesis

Conditions



Independent Variable



Dependent variable



Materials & Tools &  
planning



# The scientific method checklist

Selecting a problem

Designing  
a study

Collecting  
data

Analyzing  
data

Publication

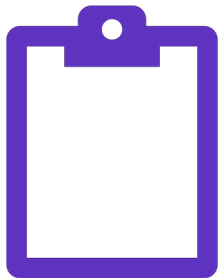


# Collecting data

Data collection methods



Observation



Survey



Interview



# Collecting data

Data collection tips

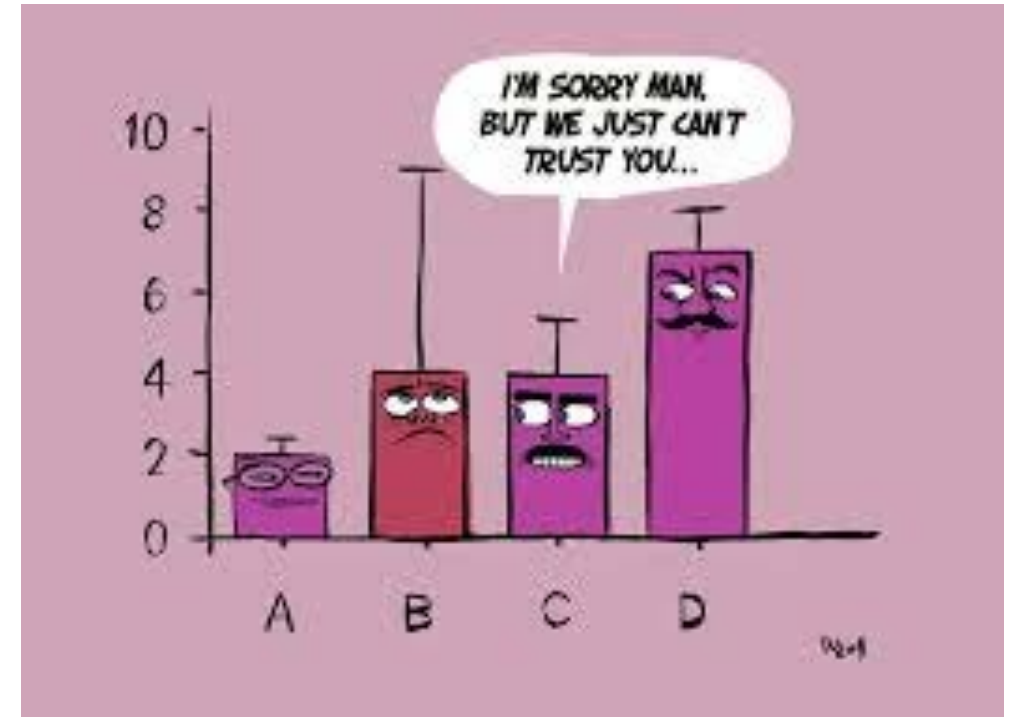
Data validity



Reliability



Uncertainty





# The scientific method checklist

Selecting a problem

Designing  
a study

Collecting  
data

Analyzing  
data

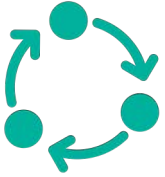
Publication



# Analysis

Data analysis tips

Use validated methods



Simplicity



Invent & validate



# The scientific method checklist

Selecting a problem

Designing  
a study

Collecting  
data

Analyzing  
data

Publication



# Publication

Interpretation and publication decision

Publication

Result

Report

Do not report

Article

Patent

Conference Proceeding

Further research

Industry concerns

Special project

# Quality in Research

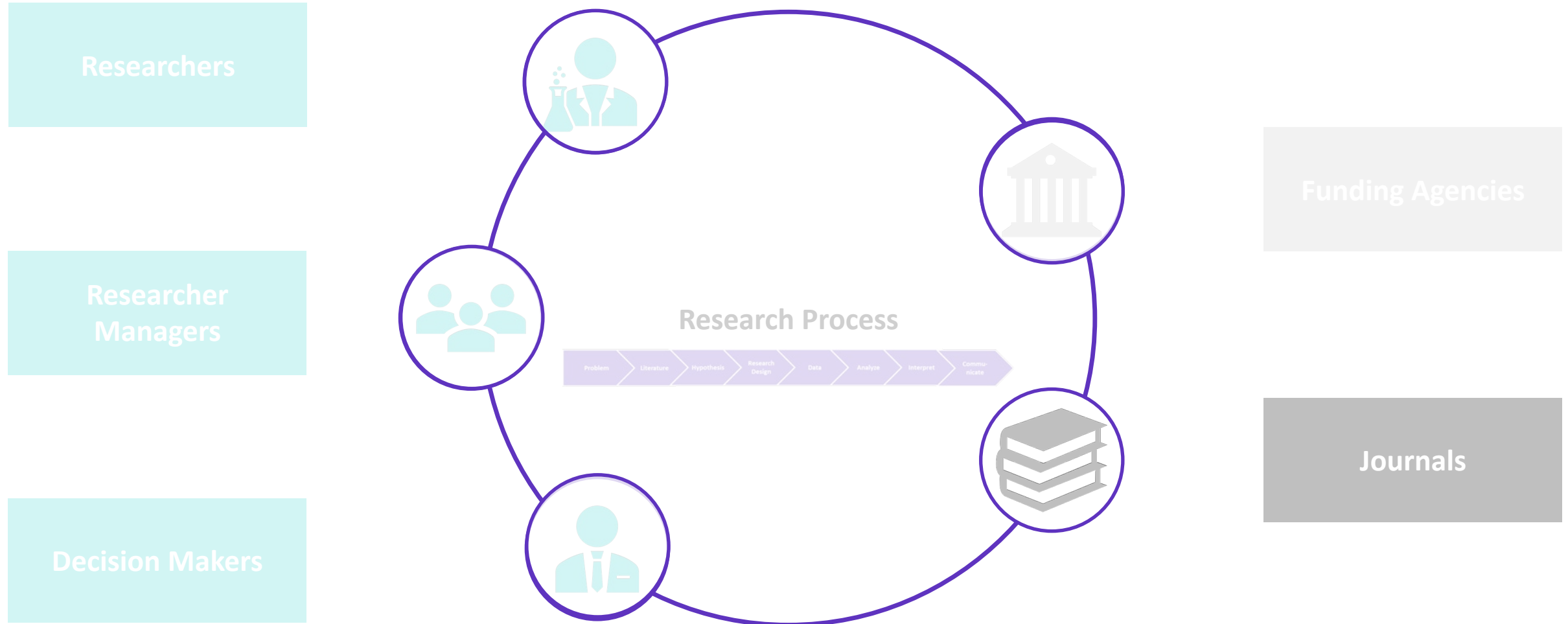
in the perspective of

**Editors**

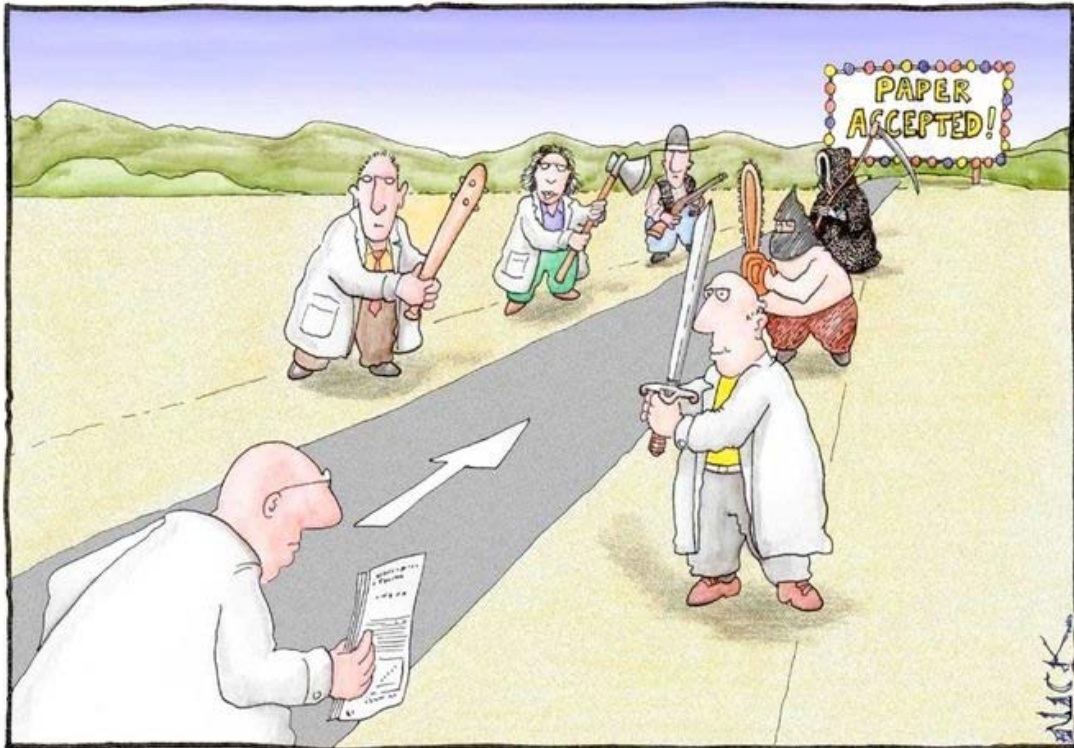




# Research Process and Stakeholders



# Publishing challenges

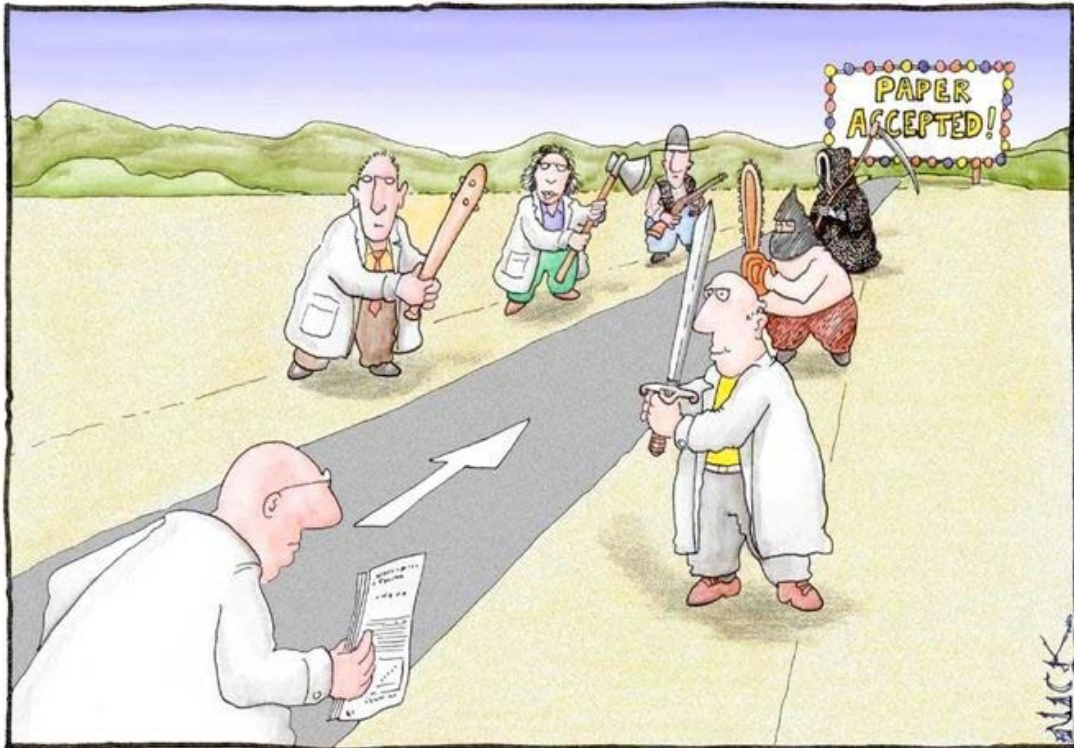


Most scientists regarded the new streamlined peer-review process as "quite an improvement."

How to publish?

Where to publish?

# Publishing challenges



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

## How to publish?

# The structure of a scientific publication

Quality guidelines in writing a scientific publications



# For whom is this guideline?

Quality guidelines in writing a scientific publications



Researchers

Write the publication in the same way reviewers and editors evaluate your work



Reviewers

Write a professional feedback by following these guidelines

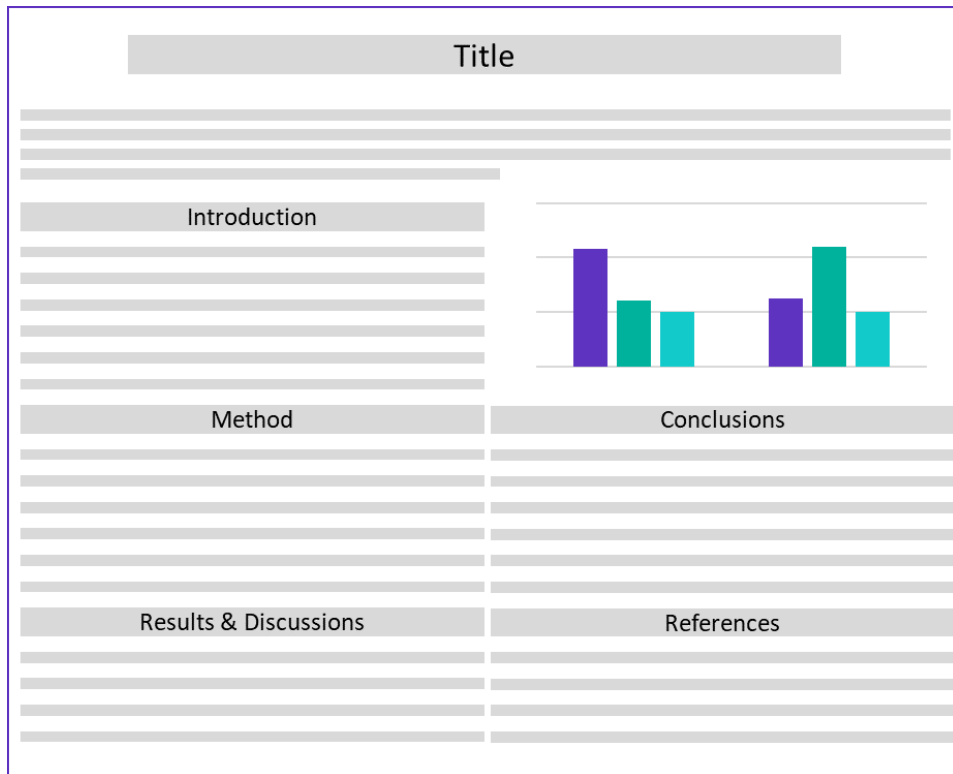


Colleagues

Use this guideline to provide feedback to your team members

# The publication as a whole

The publication should be able to answer the following questions



Journal Scope

Novelty

Significance

Quality

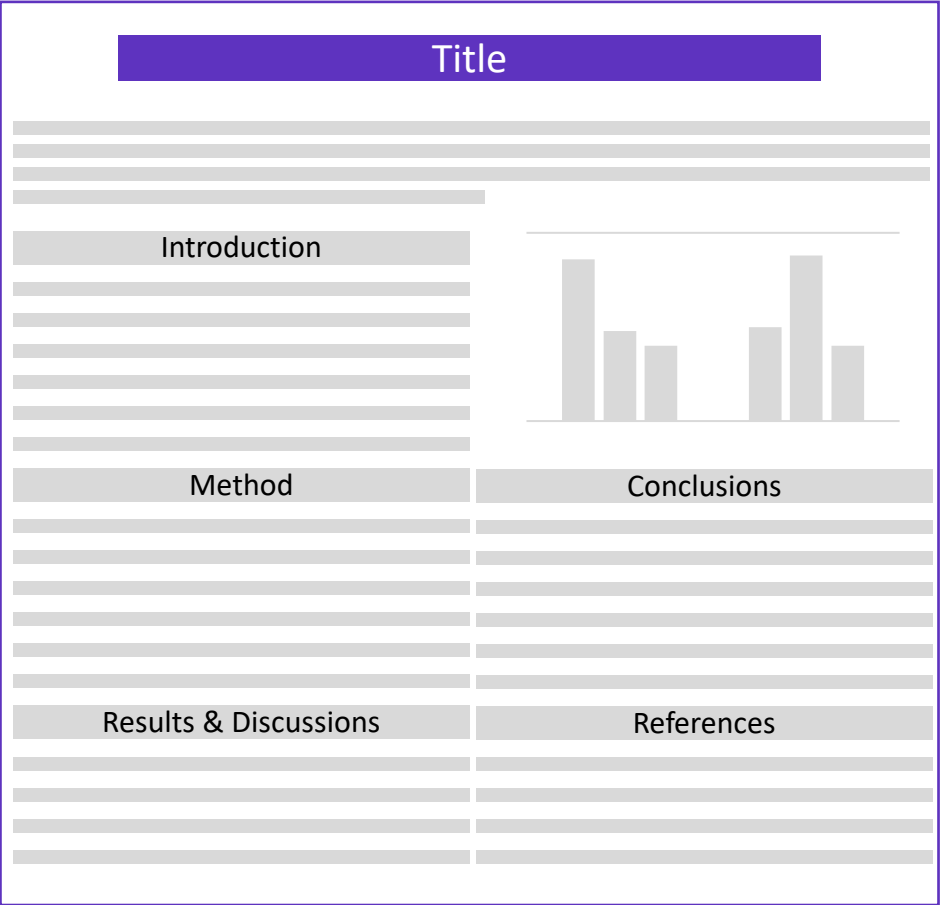
Clarity

Structure



# The title

Guidelines for writing a publication title



Informative

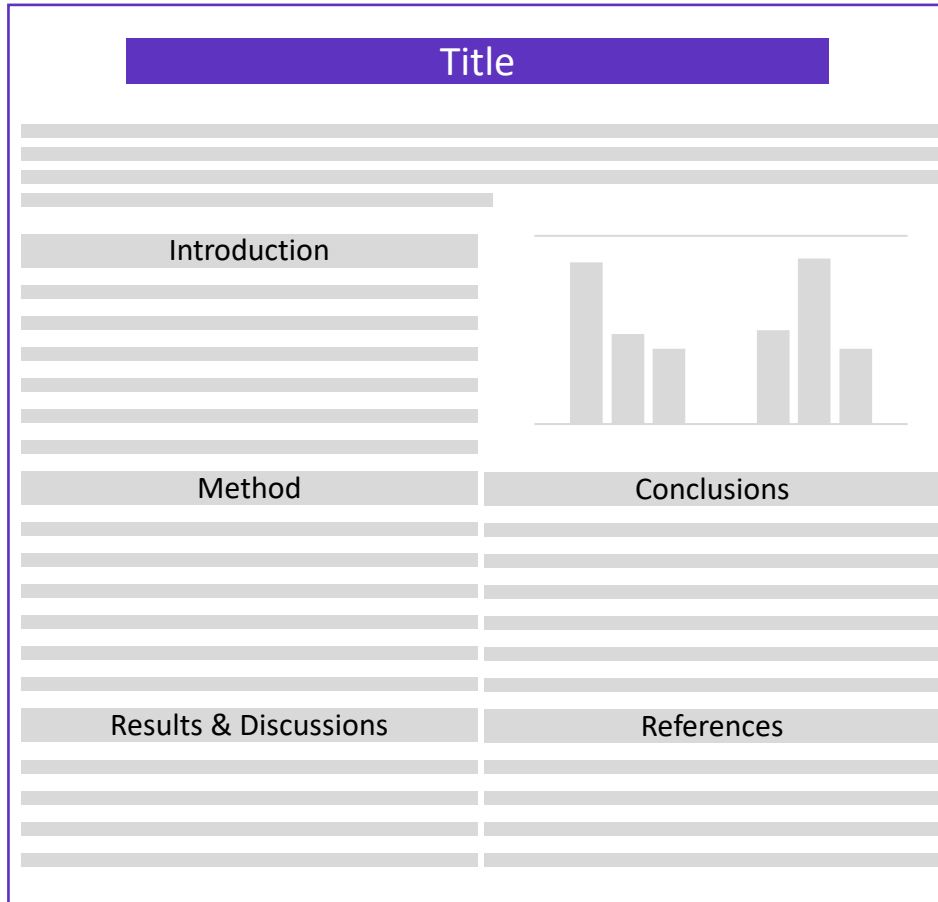
Specific

Does not include conclusions

Searchable

# The title

Guidelines for writing a publication title



“Optimizing temperature and pressure improves sputter-deposited aluminum alloy films”

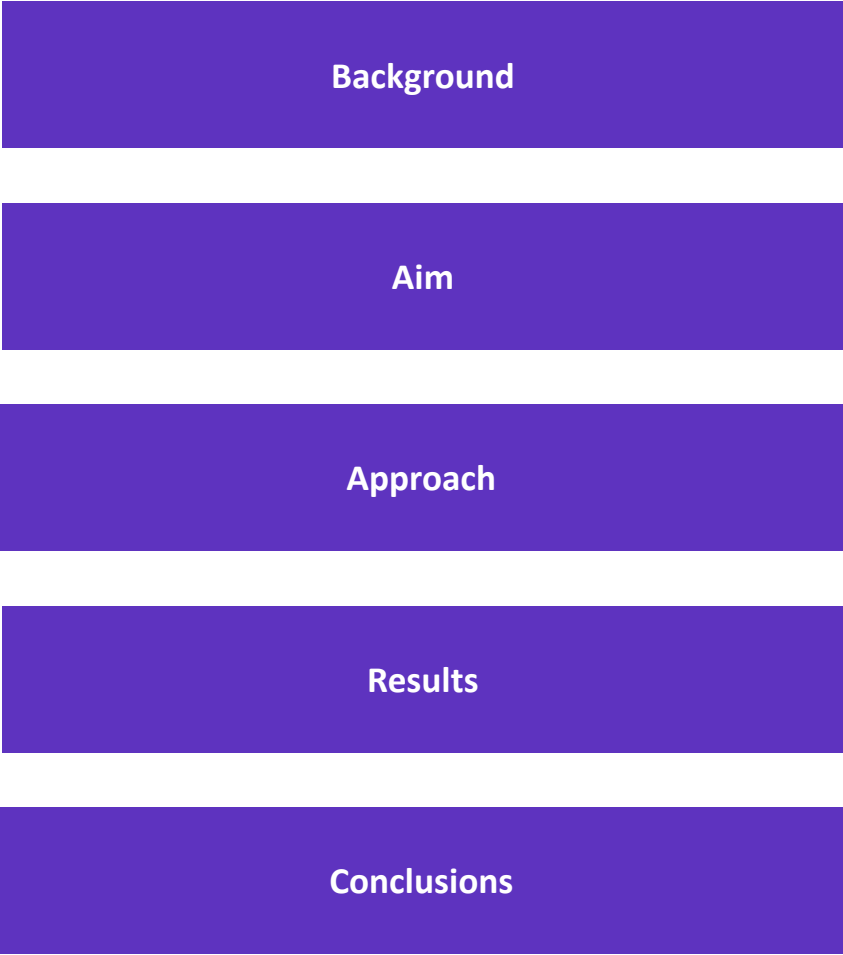
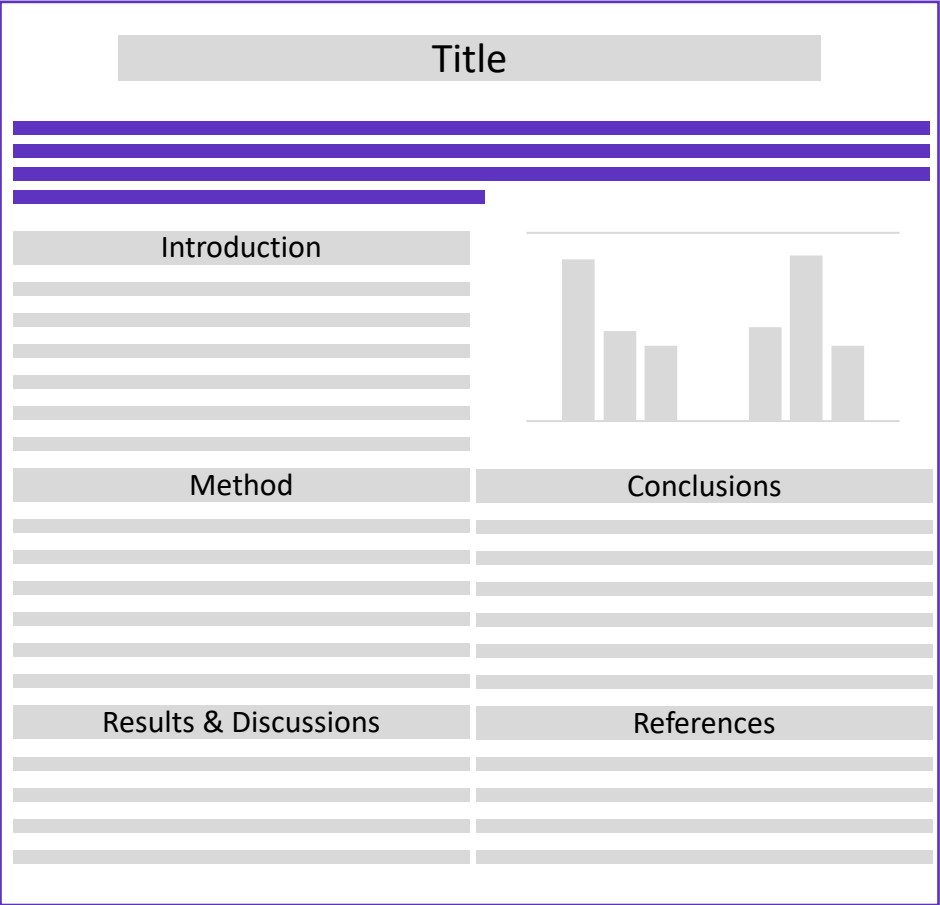
This tile includes conclusions

Does not reflect the aim and approach

“Impact of temperature and pressure on the simulated compositional uniformity of sputter-deposited aluminum alloys”

# The abstract

The abstract should be concise including 1-2 sentences on these topics



# The abstract

The abstract should be concise including 1-2 sentences on these topics

Title	
Introduction	
Method	
Results & Discussions	
Conclusions	
References	

“Reviews the manufacturing and processing challenges involved in the later stages of the manufacture of large area full frontal wire mesh coating and describes some of the techniques employed by CSW Packaging Solutions.”

Background is missing

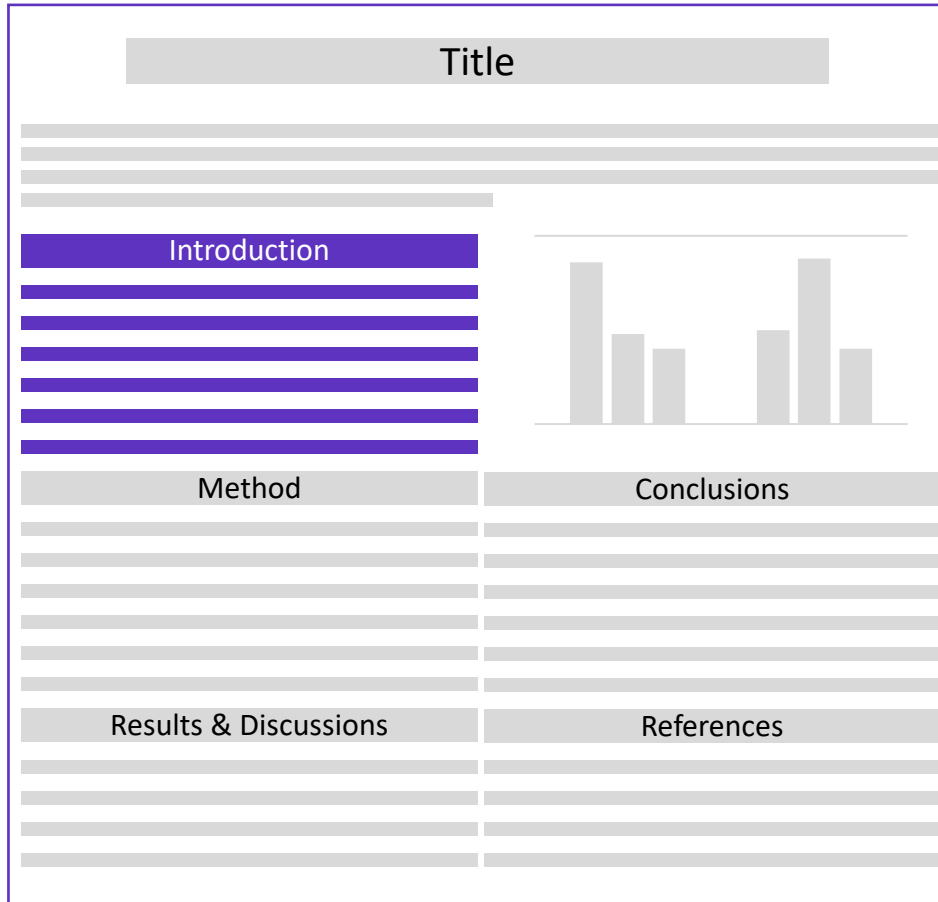
Approach is missing

Results are missing

Conclusions are missing

# The introduction

Guidelines for writing an introduction



Field importance & pre-studies

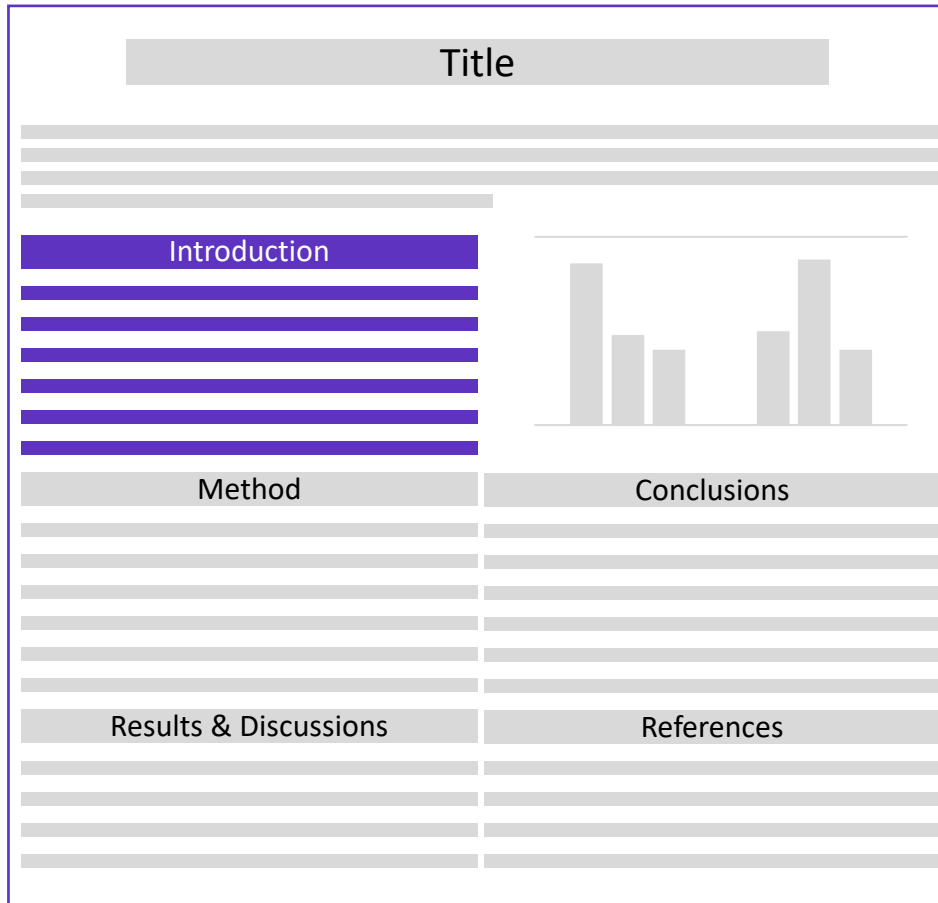
Challenge

Significance

Don't

# The introduction

## Guidelines for writing an introduction



Don't

exaggerate the importance of the results

The absolute frequency of positive words increased from **2.0% (1974-80)** to **17.5% (2014)**, a relative increase to **880%** over four decades. All 25 individual positive words contributed to the increase, particularly the words “robust,” “novel,” “innovative,” and “unprecedented,” which increased in relative frequency up to 15000%



# The method

Guidelines for writing the methodology



Reproducibility

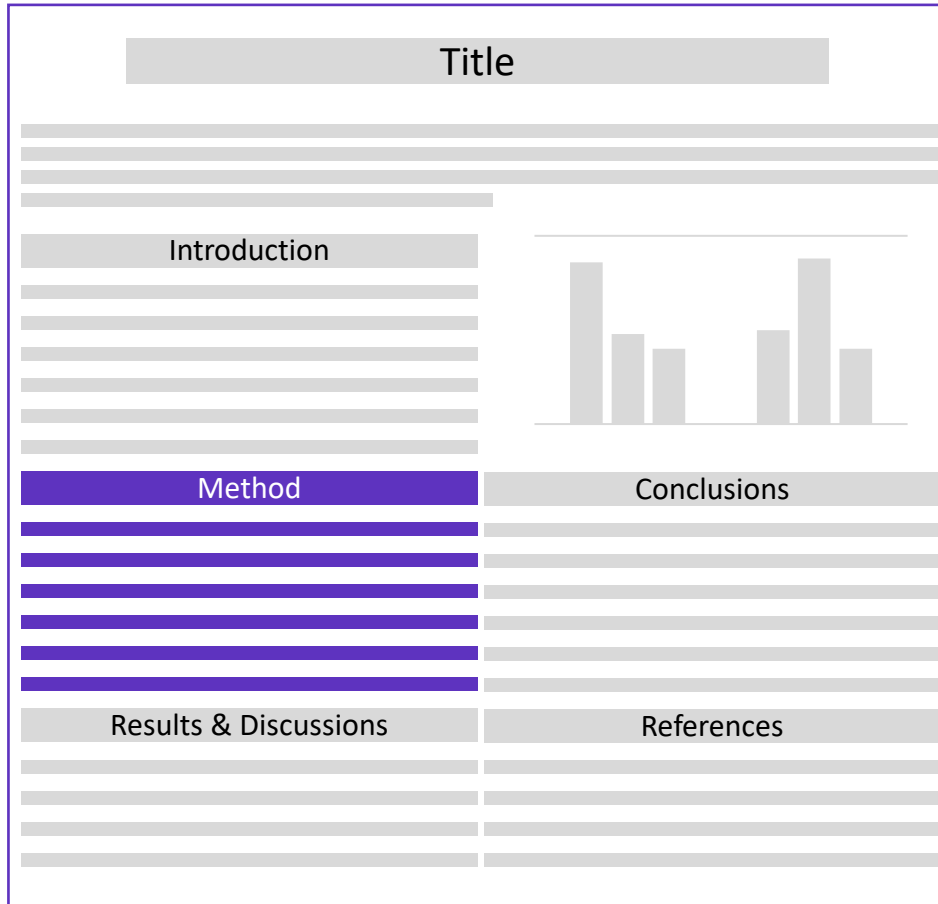
Method Justification

Analysis Justification

Don't

# The method

## Guidelines for writing the methodology



“The yearly frequencies of positive, negative, and neutral words (25 preselected words in each category), plus 100 randomly selected words were normalized for the total number of abstracts investigated. The absolute frequency of positive words increased from 2.0% (1974-80) to 17.5% (2014), a relative increase of 880% over four decades”

Don't

Includes results

# The results and discussions

Guidelines for writing the results and discussions



Logical order

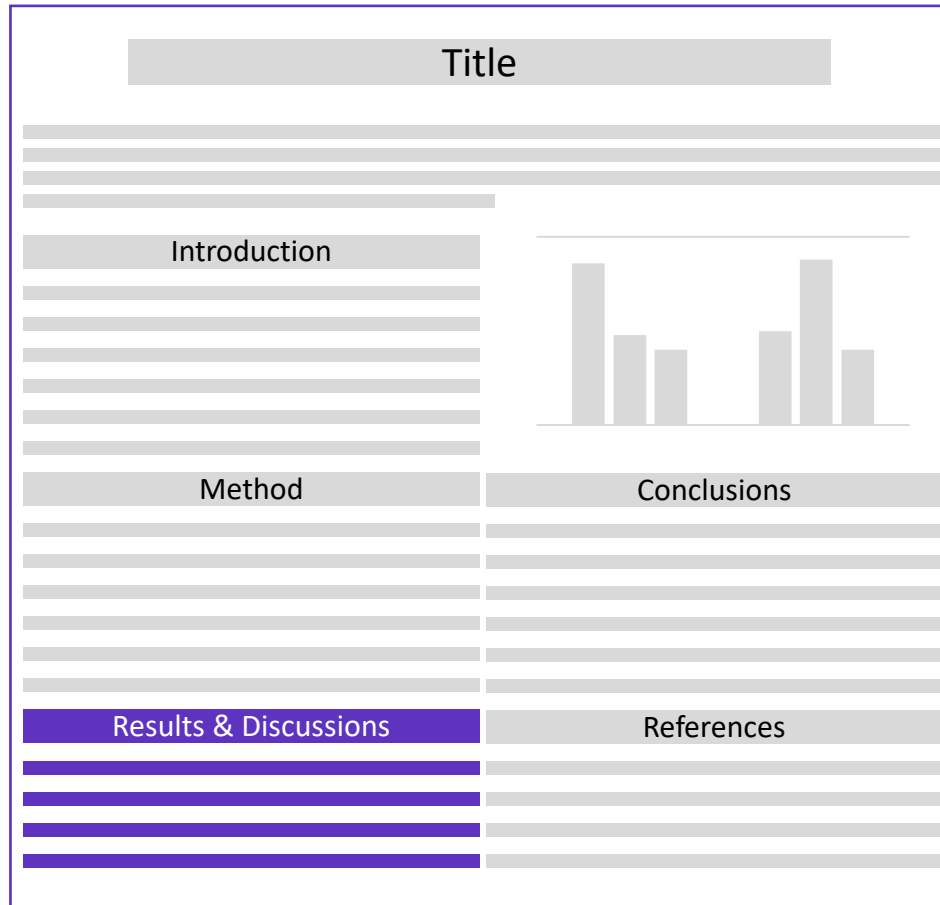
Relation to the research question

Discussion

Don't

# The results and discussions

Guidelines for writing the results and discussions



“The present study demonstrates the protective effects of oral administration of *Lactobacillus gasseri* SBT2055 (LG2055) against influenza A virus infection. This effect enables mice to be resistant to a virus.”

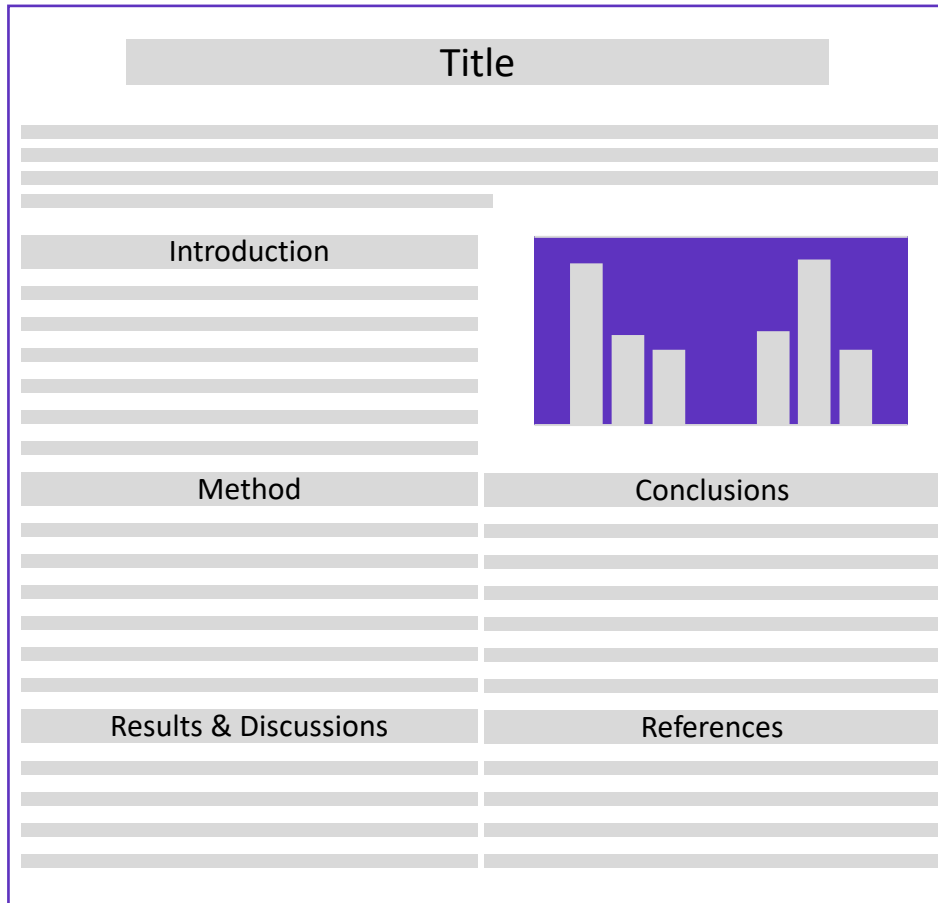
“This effect enables mice to be resistant to a virus infection as shown by improvements in the survival rates and by decrements in the virus titer in the lungs Fig. 4-5”

Don't

Draw conclusions without backing them up

# The figures & tables

All figures and tables should include a description (what is it?), a number, a unit, and an uncertainty estimate



Accuracy

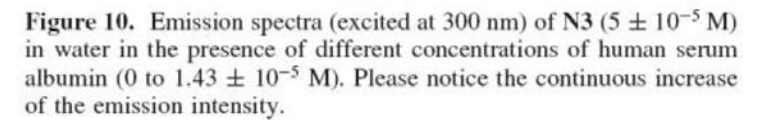
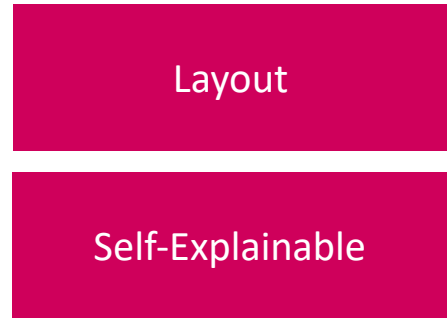
Logicity

Self-Explainable

Uncertainty

Tables vs. Figures

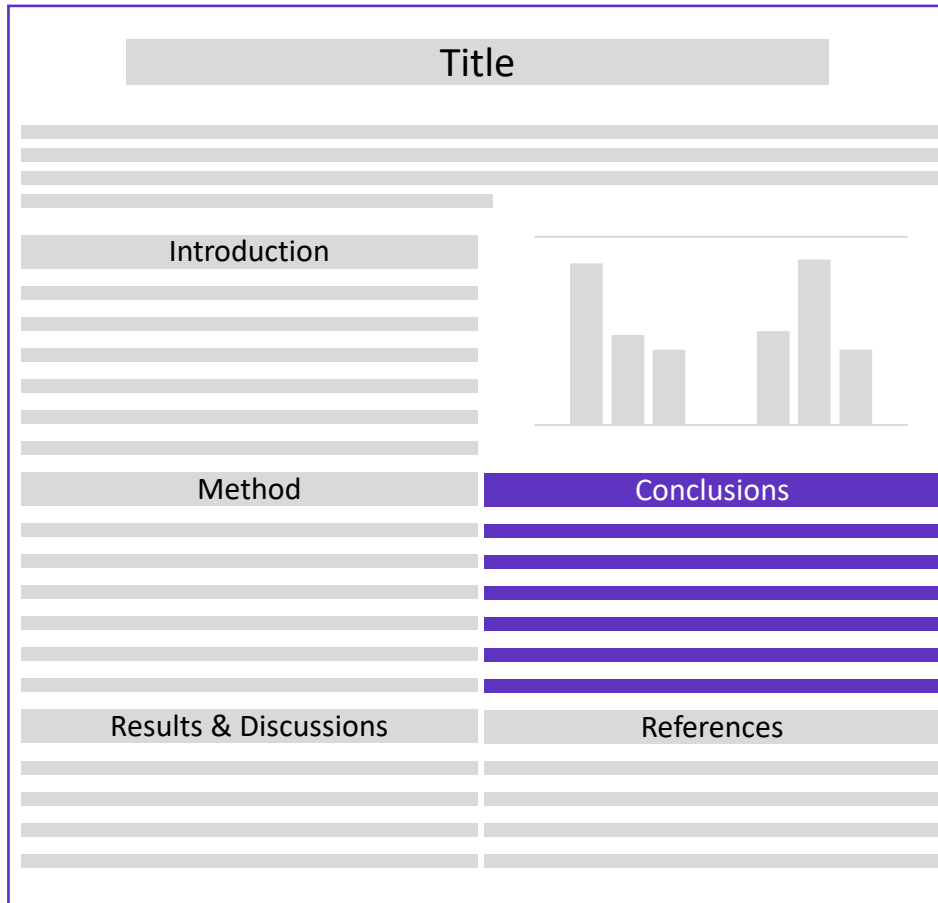
All figures and tables should includes a description (what is it?), a number, a unit, and an uncertainty estimate





# The conclusions

The conclusion should provide a brief summary of results & discussions



Significance

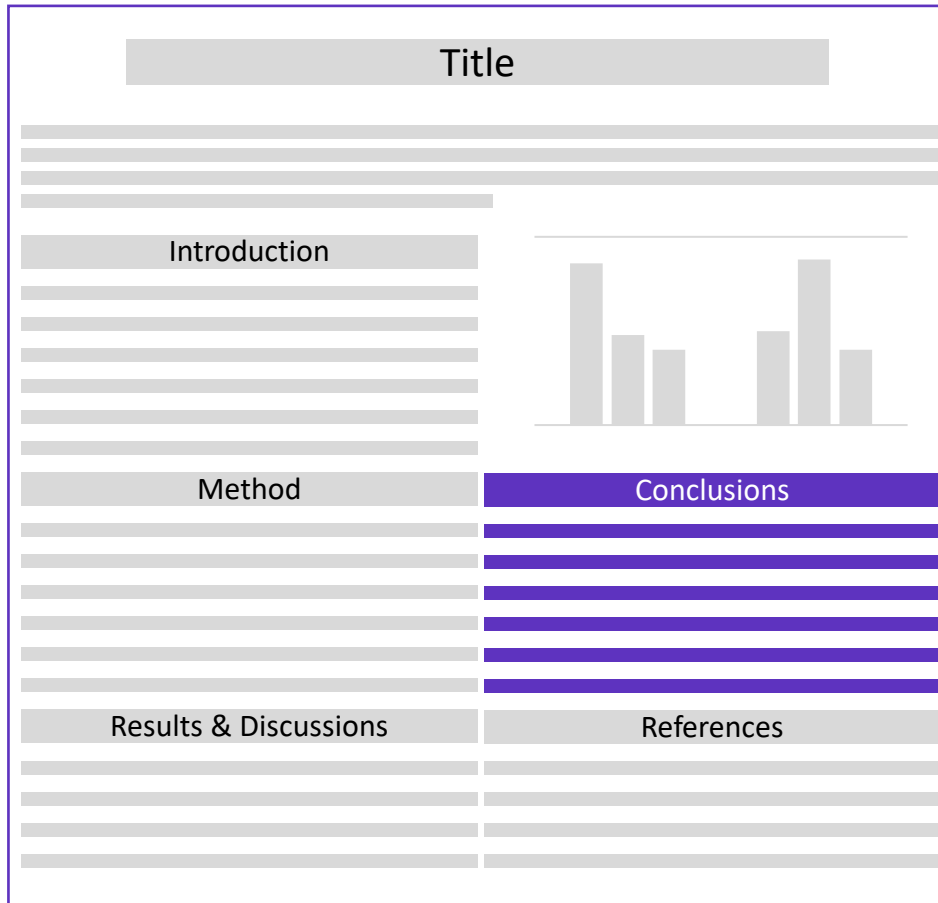
Evidence

Future perspective

Don't

# The conclusions

The conclusion should provide a brief summary of results & discussions



“In this work we have investigated the Use of positive and negative words in scientific PubMed abstracts. The absolute frequency of positive words increased from 2.0% (1974-80) to 17.5% (2014), a relative increase of 880% over four decades. This indicates that scientists are tending to exaggerate the importance of their research findings. This is due to the publish or perish culture.”

Don't

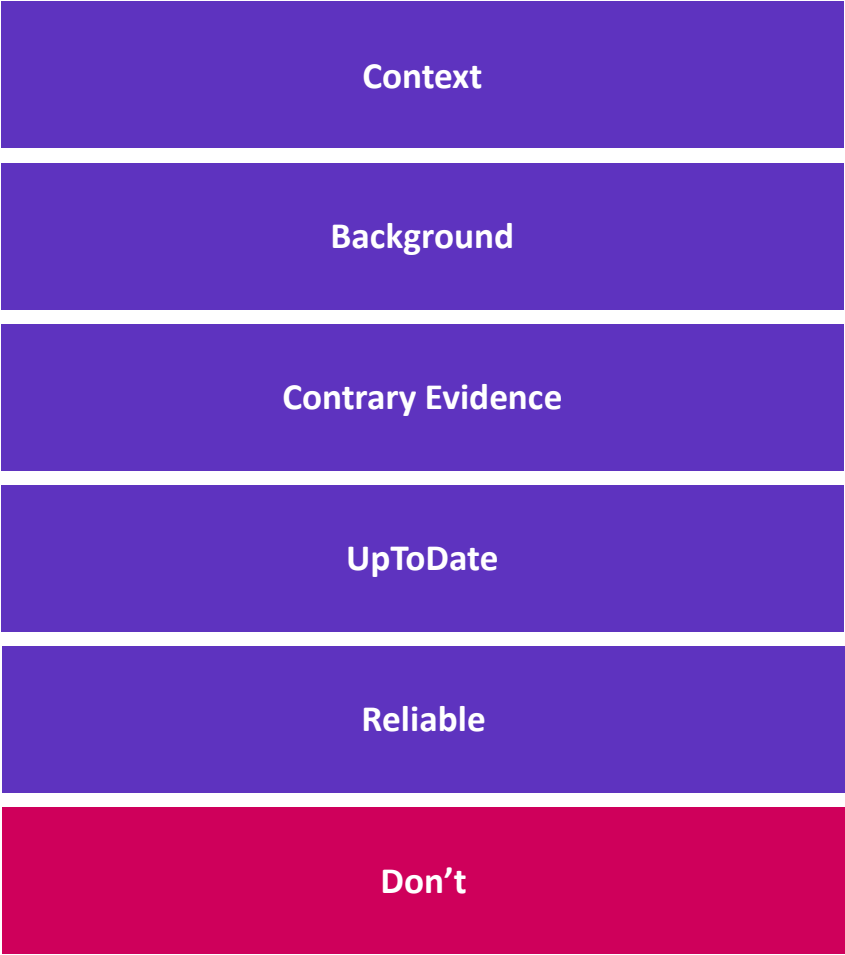
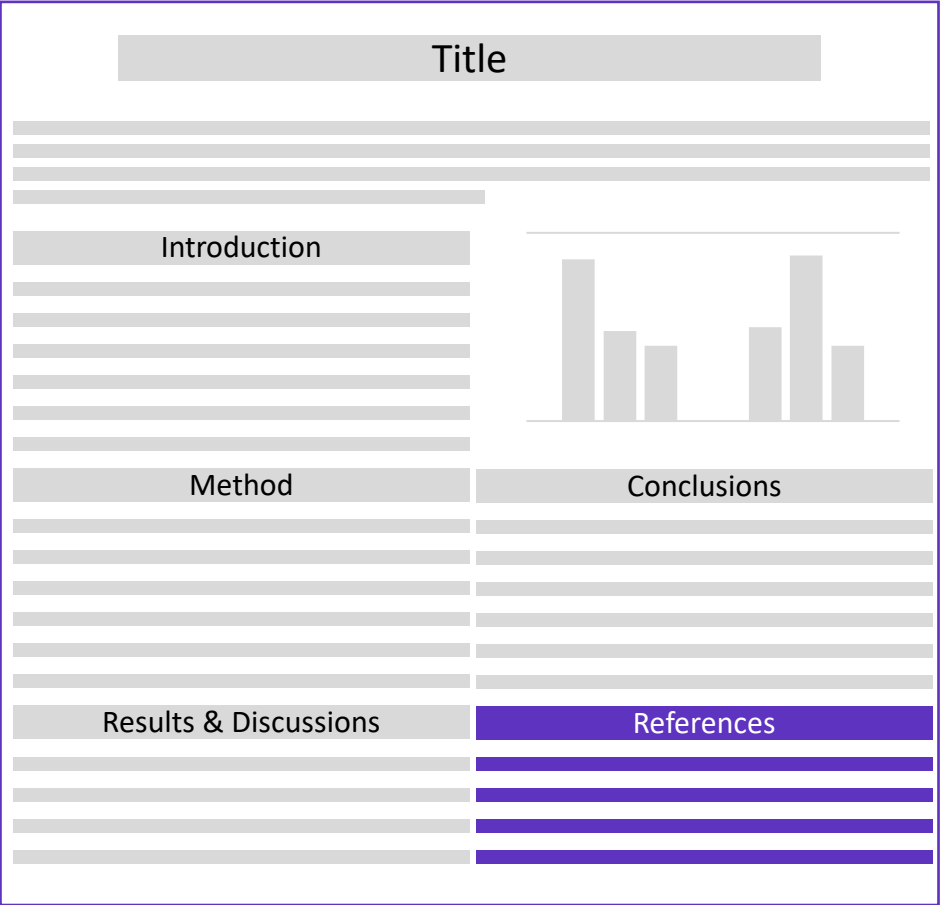
repeat arguments made in the results and discussion

Don't

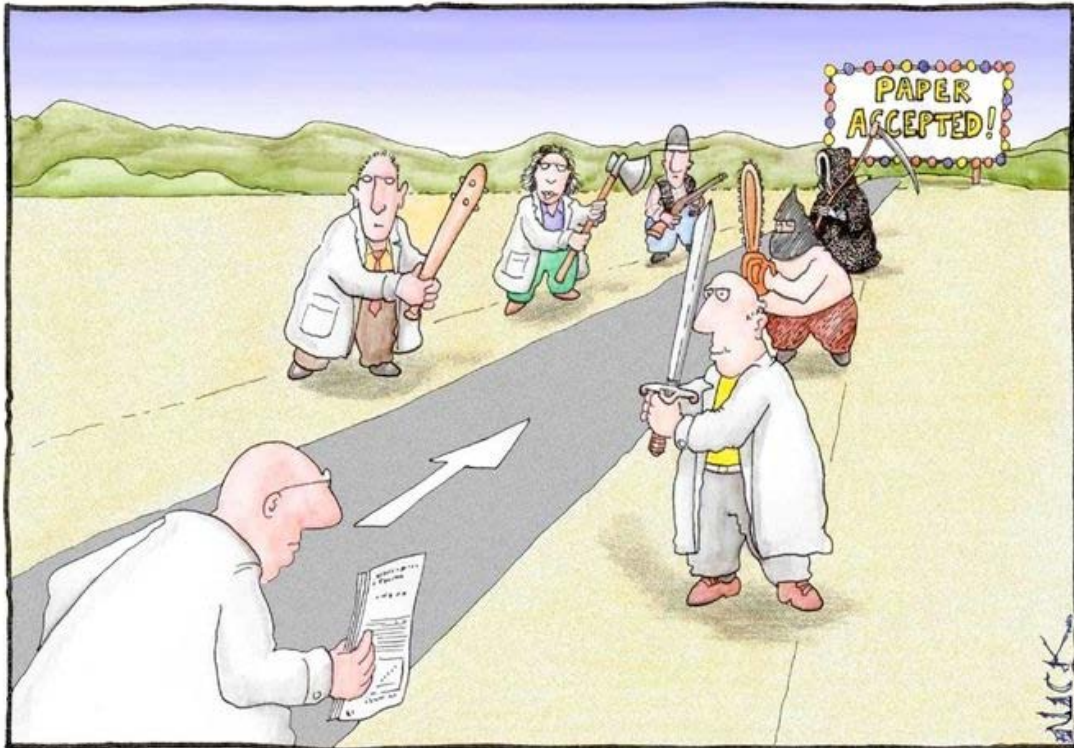
Introduce new evidence or new arguments

# The citations

References should be UpToDate, reliable and provide contrary evidence if applicable




# Publishing challenges



Most scientists regarded the new streamlined peer-review process as "quite an improvement."

## Where to publish?

# Where to publish?

ANALYTICAL LETTERS 

**Impact Factor**  
**1.03** **0.886**  
2014 5 year


JCR® Category	Rank in Category	Quartile in Category
CHEMISTRY, ANALYTICAL	<b>58 of 74</b>	<b>Q4</b>

Data from the 2014 edition of *Journal Citation Reports*®

**Publisher**  
TAYLOR & FRANCIS INC, 530 WALNUT STREET, STE 850, PHILADELPHIA, PA  
19106 USA

**ISSN:** 0003-2719  
**eISSN:** 1532-236X

**Research Domain**  
Chemistry



## How journals are classified?

# Journal Impact Factor

## Journal Impact Factor Calculation

$$\text{2018 Journal Impact Factor} = \frac{942}{80} = 11.775$$

How is Journal Impact Factor Calculated?

$$\text{JIF} = \frac{\text{Citations in 2018 to items published in 2016 (656) + 2017 (286)}}{\text{Number of citable items in 2016 (40) + 2017 (40)}} = \frac{942}{80}$$

The impact factor is a measure of the frequency with which the average article in a journal has been cited in a particular year

The JCR also lists journals and their impact factors and ranking in the context of their specific field(s).



# Journal Quartile

J1	IF1=11	Q1 $0 < Z < 0.25$
J2	IF2=10.5	
J3	IF3=10	Q2 $0.25 < Z < 0.5$
J4	IF4=9.8	
J5	IF5=8.6	Q3 $0.5 < Z < 0.75$
J6	IF6=8.3	
J7	IF7=7.2	Q4 $0.75 < Z$
J8	IF8=6.5	

Quartile (z) measures the rank of a journal in comparison to the total number of journals in a category

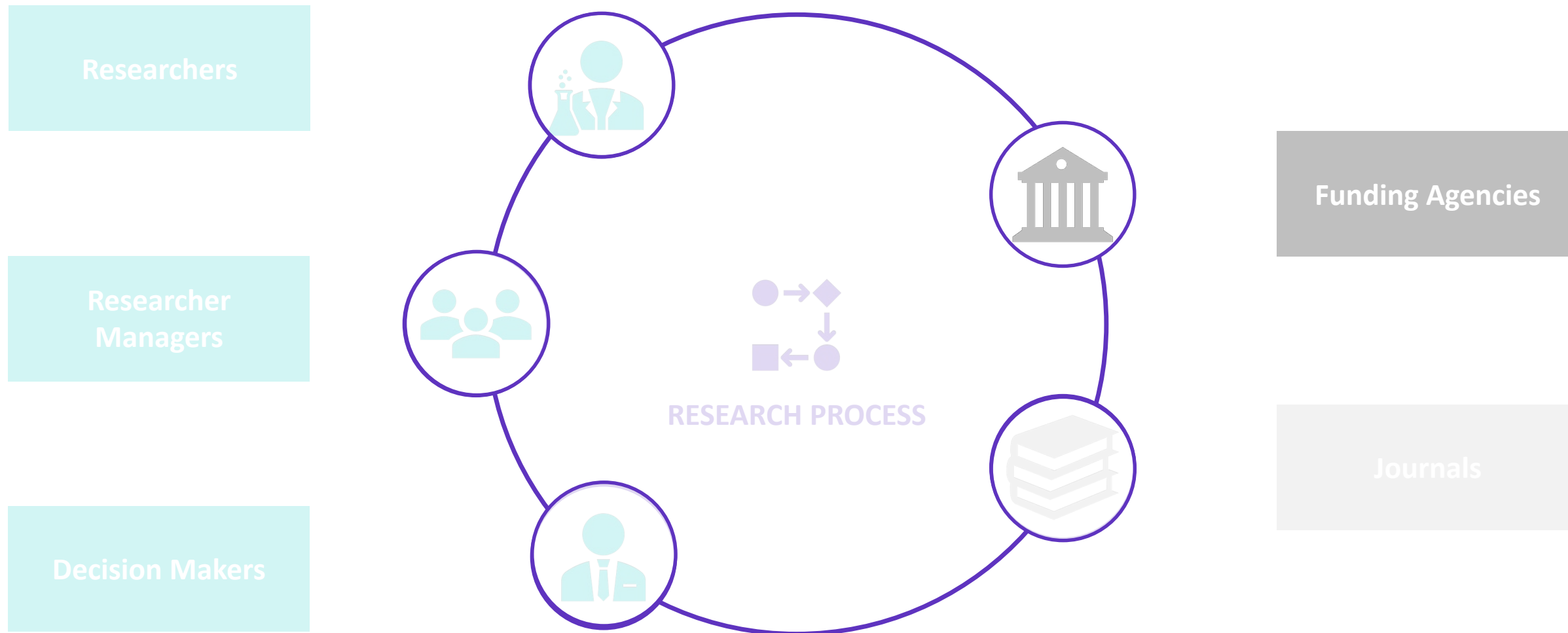
# Quality in Research

in the perspective of

## Governments & Funders



# Research Process and Stakeholders



**We will discuss two evaluation procedures**

**REF** Research  
2021 Excellence  
Framework



**We will discuss two evaluation procedures**

**REF** Research  
2021 Excellence  
Framework



# Research Excellence Framework 2021 (UK)

## Overview of REF process

Assessment Period 2013-2014 /2020

### Research Institutions



Provide information on:

- Research staff
- Details about publications (2.5 the staff)
- Case studies highlighting scientific impact
- Doctoral degrees awarded
- Quantitative impact indicators information

### Assessment



Panel A

Panel B

Panel C

Panel D

34 Units of Assessment according to subject area



Funds Distribution



# Research Excellence Framework 2021 (UK)

## Overview of Panels

### Panel A

- Clinical Medicine
- Public Health
- Dentistry, Nursing and Pharmacy
- Psychology, Psychiatry and Neuroscience
- Biological Sciences
- Agriculture

### Panel B

- Earth Systems
- Chemistry
- Physics
- Biological Sciences
- Mathematical Sciences
- Computer Science and Informatics
- Engineering

### Panel C

- Architecture
- Geography
- Archaeology
- Economics and Econometrics
- Business and Management Studies
- Law
- Politics and International Studies
- Social Policy
- Sociology
- Etc.

### Panel D

- Area Studies
- Modern Languages and Linguistics
- English Language and Literature
- History
- Classics
- Philosophy
- Theology
- Music
- Etc.

# Research Excellence Framework 2021 (UK)

## Overview of REF criteria

Criteria	Description	Weight
Outputs	Assessment of the quality of submitted research outputs in terms of their originality, significance and rigor	60%
Impact	Assessment of the 'reach and significance' of impacts on the economy, society, culture, public policy or services, health, the environment or quality of life that were underpinned by excellent research conducted in the submitted unit	25%
Environment	Assessment of the approach to enabling impact from its research, and its contribution to the vitality and sustainability of the wider discipline or research base	15%

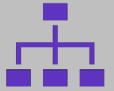
**We will discuss two evaluation procedures**

**REF** Research  
2021 Excellence  
Framework



# The evaluation procedure of the Max Planck Society (Fachbeirat)

Structure of status report : Evaluation points (1/2)



Structure and organization of the institute



Research program of the institute and its departments



Personnel structure



Budget



Material resources, equipment and premises



Junior scientists and visiting scientists



Publications

# The evaluation procedure of the Max Planck Society (Fachbeirat)

Structure of status report : Evaluation points (2/2)



Equal opportunities



Relations with research institutions in Germany and abroad



Knowledge transfer activities/relations with industry, politics and society



Appointments, scientific awards and memberships



Symposia and conferences



Committee work

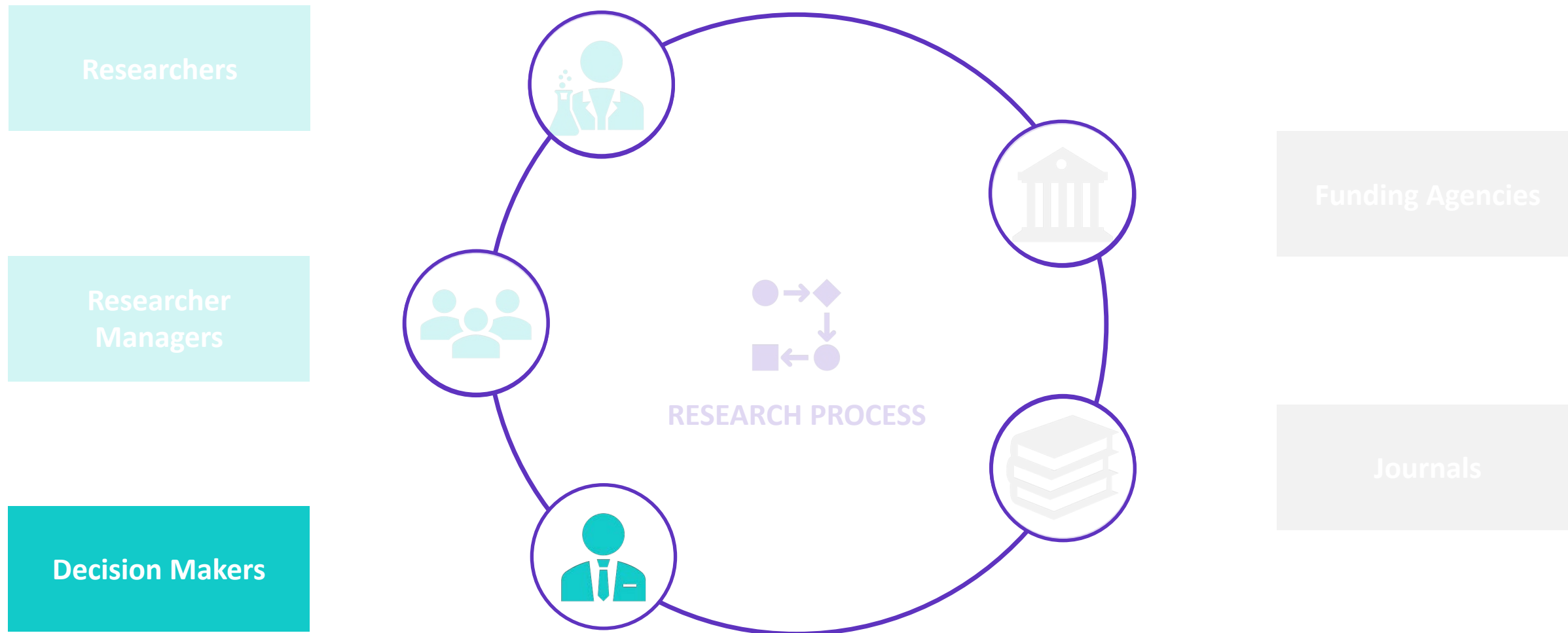


Public work

# **Quality in Research** **for Researchers, Research** **Managers & Decision Makers**



# Research Process and Stakeholders





# Decision makers

The university decision makers set the targets and quality standards for researchers and research managers



Decision Makers

## Strategy goals

As a first step the decision makers build their strategic goals, for ex.

- Improve research output
- Improve research impact
- Improve ranking
- Focus on specific areas of research
- Link research to industry
- Establish innovation culture among scientists
- Etc.

## Strategy Target

Set university targets:

- Increase number of articles in indexed journals by 20%
- Increase total citations by 30%
- Increase number of articles in Chemistry by 50%
- Increase collaborations with industry by 25%
- Add patents to the institutes' research portfolio

Policies

Researcher targets

Quality standards

# Decision makers

Exemplary research quality related policies

Award policies



Publication policies



Reporting



Promotional policies



# Decision makers

Exemplary research quality related targets

**Output targets**  
(subject category related)



**Impact targets**



**Collaboration Targets**  
(per research group)



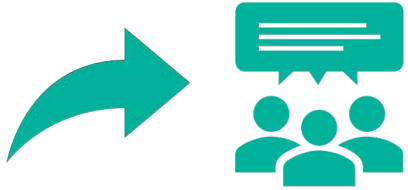
**Communication Targets**



# Decision makers

Exemplary research quality related quality standards

Internal Review



External Review



Research Methodology



# Decision makers

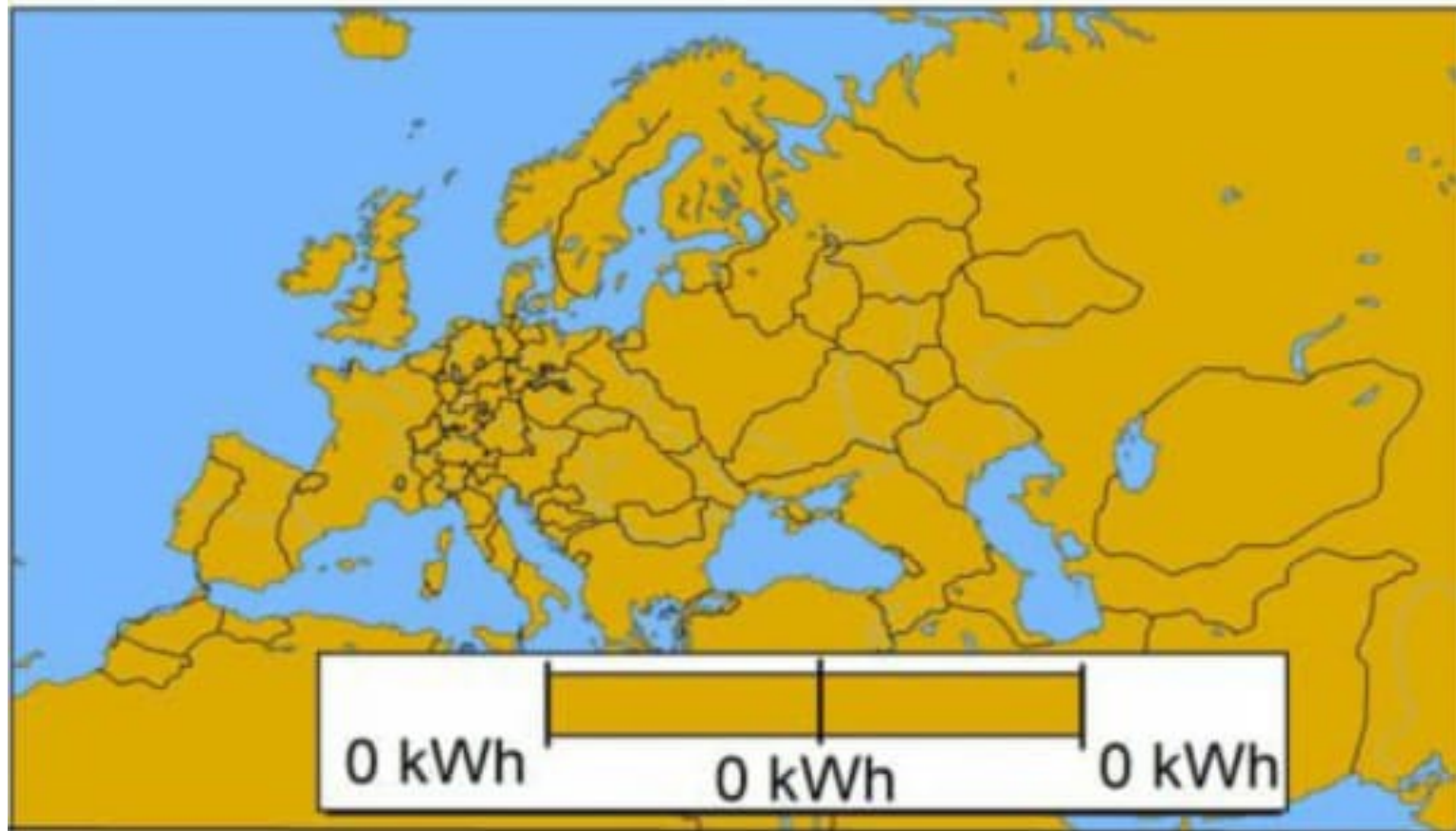
## Bibliometric performance indicators

 Productivity And Impact	 Normalization	 Top Performance	 Scientific Collaborations	 JIF Documents
Web of Science Documents	Category Normalized Citation Impact	% Documents in Top 1%	% Industry Collaborations	Documents in JIF Journals
Times Cited	Category Expected Citations	% Documents in Top 10%	% International Collaborations	Documents in Q1 Journals
Citation Impact	Journal Normalized Citation Impact	Average percentile	Collaborations with Organizations	Documents in Q2 Journals
% of Documents Cited	Journal Expected Citations	Highly Cited Papers	Collaborations with Countries	Documents in Q3 Journals
H Index		Hot Papers	Collaborations with Authors	Documents in Q4 Journals

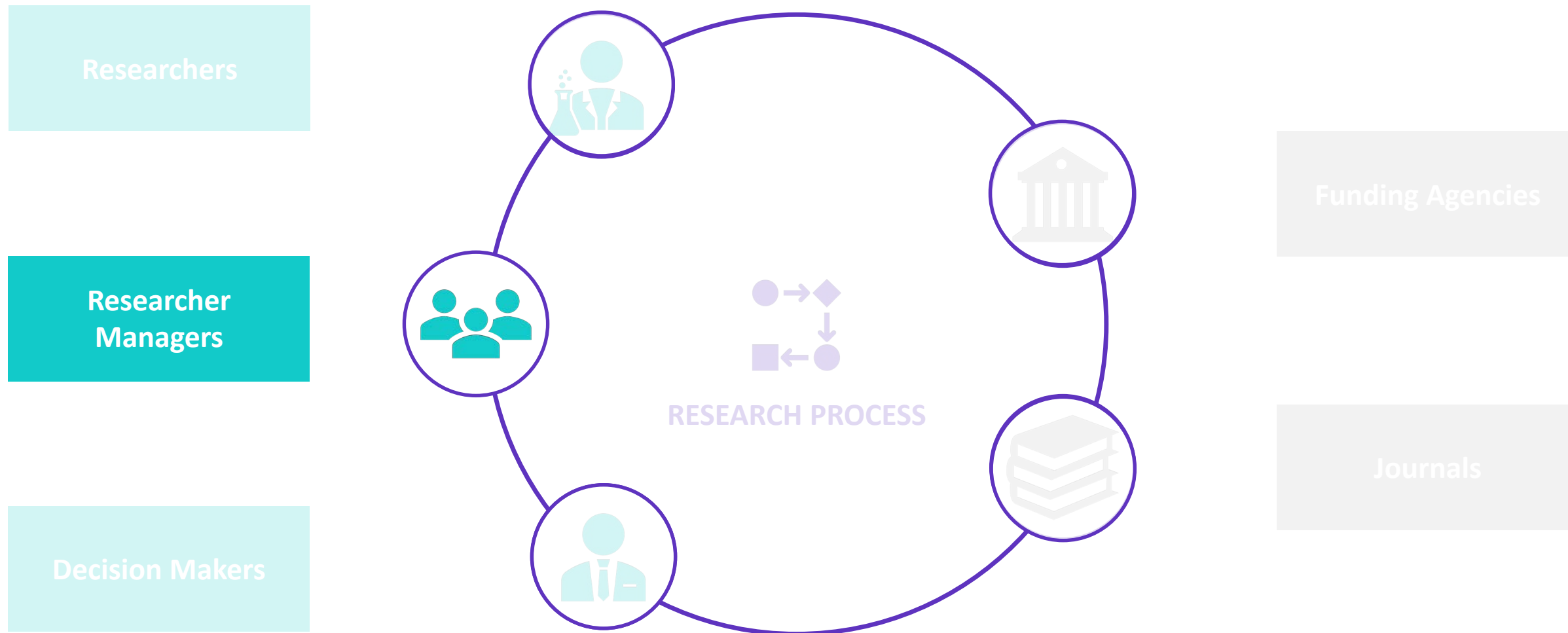
# Data consistency and relevance

Use indicators carefully in order to get relevant conclusions.

Electricity consumption in Europe in 1507



# Research Process and Stakeholders





# Research managers

Exemplary research quality related guidelines

Align with university



Funders



Researchers








Reporting

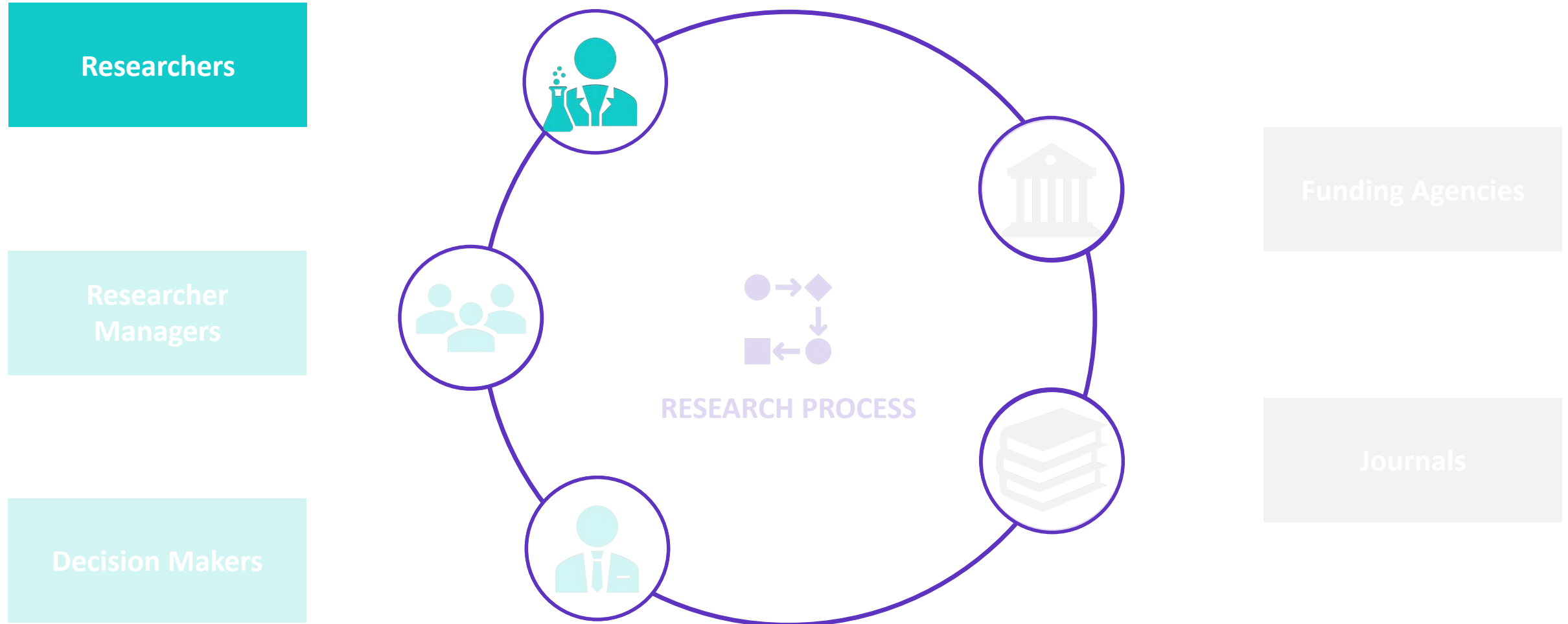


# Research managers

## Biometric performance indicators

 <b>Productivity And Impact</b>	 <b>Normalization</b>	 <b>Top Performance</b>	 <b>Scientific Collaborations</b>	 <b>JIF Documents</b>
Web of Science Documents	Category Normalized Citation Impact	% Documents in Top 1%	% Industry Collaborations	Documents in JIF Journals
Times Cited	Category Expected Citations	% Documents in Top 10%	% International Collaborations	Documents in Q1 Journals
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% of Documents Cited	Journal Expected Citations	Highly Cited Papers	Collaborations with Countries	Documents in Q3 Journals
H Index		Hot Papers	Collaborations with Authors	Documents in Q4 Journals

# Research Process and Stakeholders



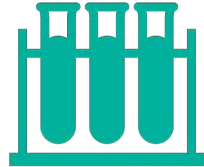
# Researchers

Exemplary research quality related guidelines

Fun!



Research methodology



University








Develop



# Researchers

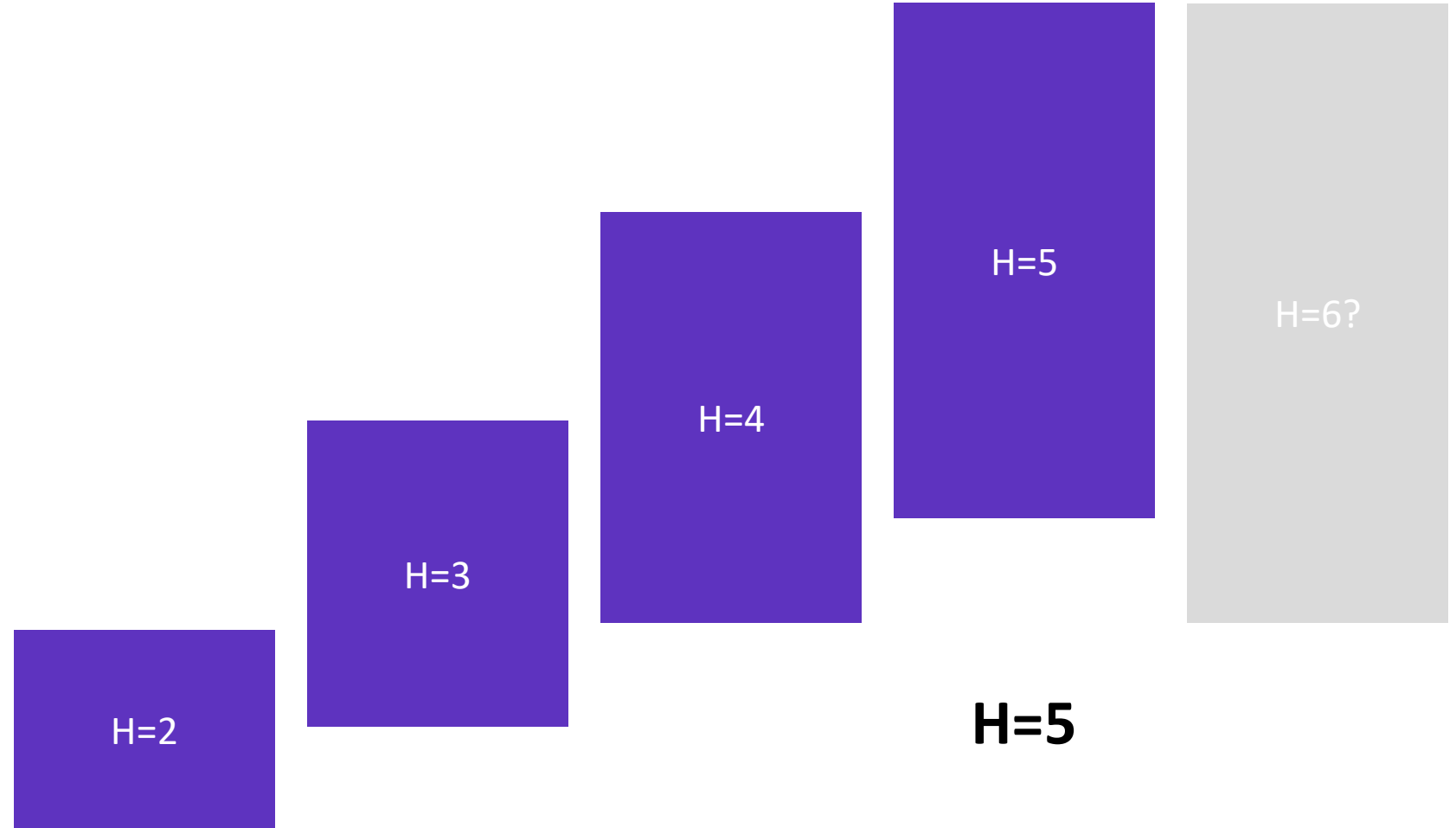
## Biometric performance indicators

 <b>Productivity And Impact</b>	 <b>Normalization</b>	 <b>Top Performance</b>	 <b>Scientific Collaborations</b>	 <b>JIF Documents</b>
Web of Science Documents	Category Normalized Citation Impact	% Documents in Top 1%	% Industry Collaborations	Documents in JIF Journals
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% of Documents Cited	Journal Expected Citations	Highly Cited Papers	Collaborations with Countries	Documents in Q3 Journals
H Index		Hot Papers	Collaborations with Authors	Documents in Q4 Journals

# What is the H-Index

The maximum  $h$  value such that an author has published  $h$  papers with at least  $h$  citations

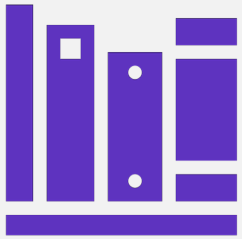
Publication 1	12
Publication 2	10
Publication 3	9
Publication 4	7
Publication 5	5
Publication 6	4
Publication 7	3
Publication 8	2



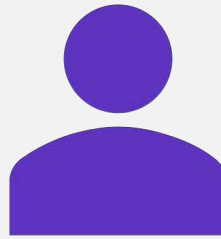
# Researchers

## Evaluation Indicators for Individual Researchers

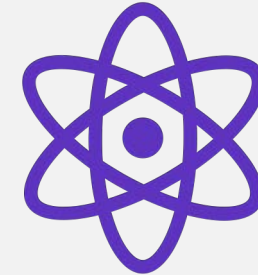
### Output



### Profile



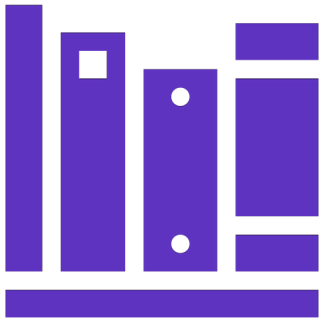
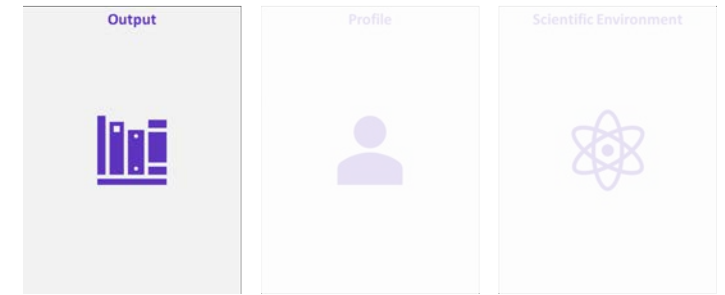
### Scientific Environment



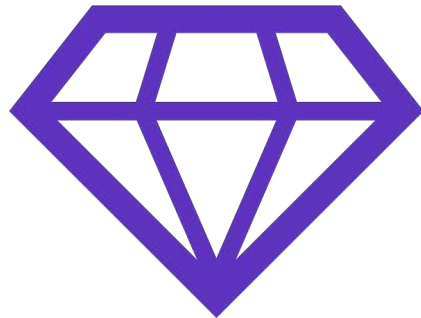


# Researchers

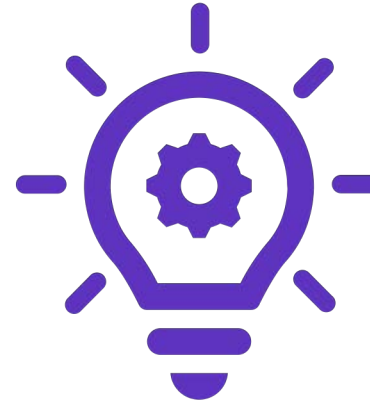
Evaluation Indicators for Individual Researchers: **Output**



**Publications  
number and quality**



**Output  
value**



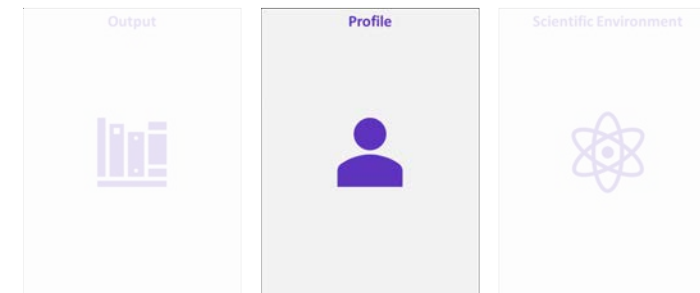
**Originality and  
Innovation**



**Participation in  
conferences**

# Researchers

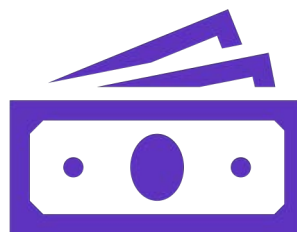
Evaluation Indicators for Individual Researchers: **Profile**



Managerial &  
Strategic Skills



Research &  
Teaching Skills



Attract  
Funding



Awards &  
Prizes



Benefit to  
Society



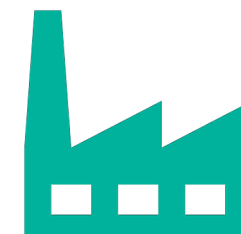
Reviewer for  
journals



International  
Collaboration



Doctorate  
Committee



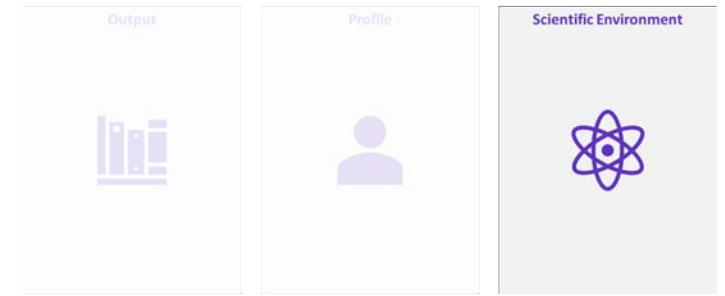
Industry  
Collaboration



Networking  
Ability

# Researchers

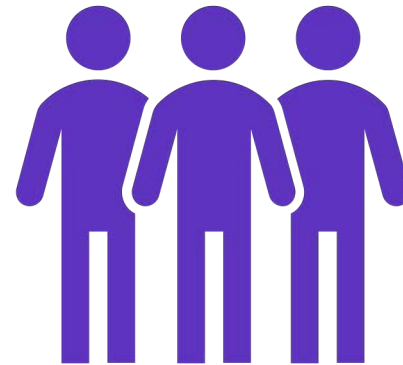
Evaluation Indicators for Individual Researchers: **Scientific Environment**



**Country and  
Research Quality**



**Access to  
Equipment and  
Documents**



**Team & supervisor  
style, skills and  
information**



**Institution policies,  
managerial style**

# Web of Science documents

Biochemistry Molecular Biology University of Oxford most productive author

Robinson, Carol V.

CLAIM THIS RECORD

BETA

Unclaimed - This is an algorithmically generated author record

University of Oxford

Chem Res Lab

OXFORD, ENGLAND

Alternative names:

Robinson, Carol V.

Robinson, CV

Robinson, Carol, V

Robinson, Carol

Organizations:

2001-2020

University of Oxford

2018-2018

Dept Chem

2018-2018

OMass Technol

2002-2012

University of Cambridge

2006-2006

Universite Paris Saclay

View more organizations

+

393 publications from Web of Science Core Collection

View as a set of results to export, analyze, and link to full text

Citation Network

H-index

91

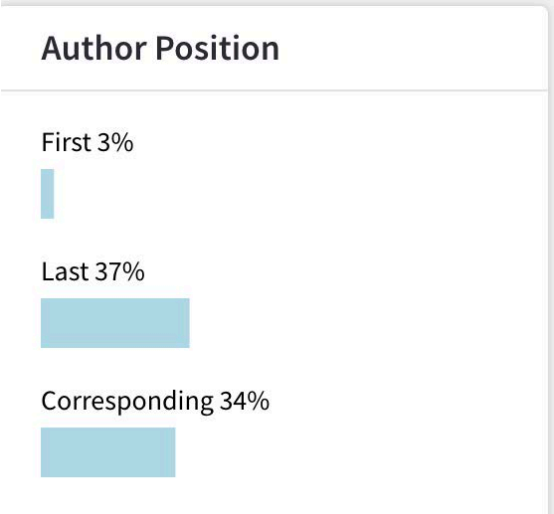
Sum of Times Cited

27,011

Citing Articles

16,661

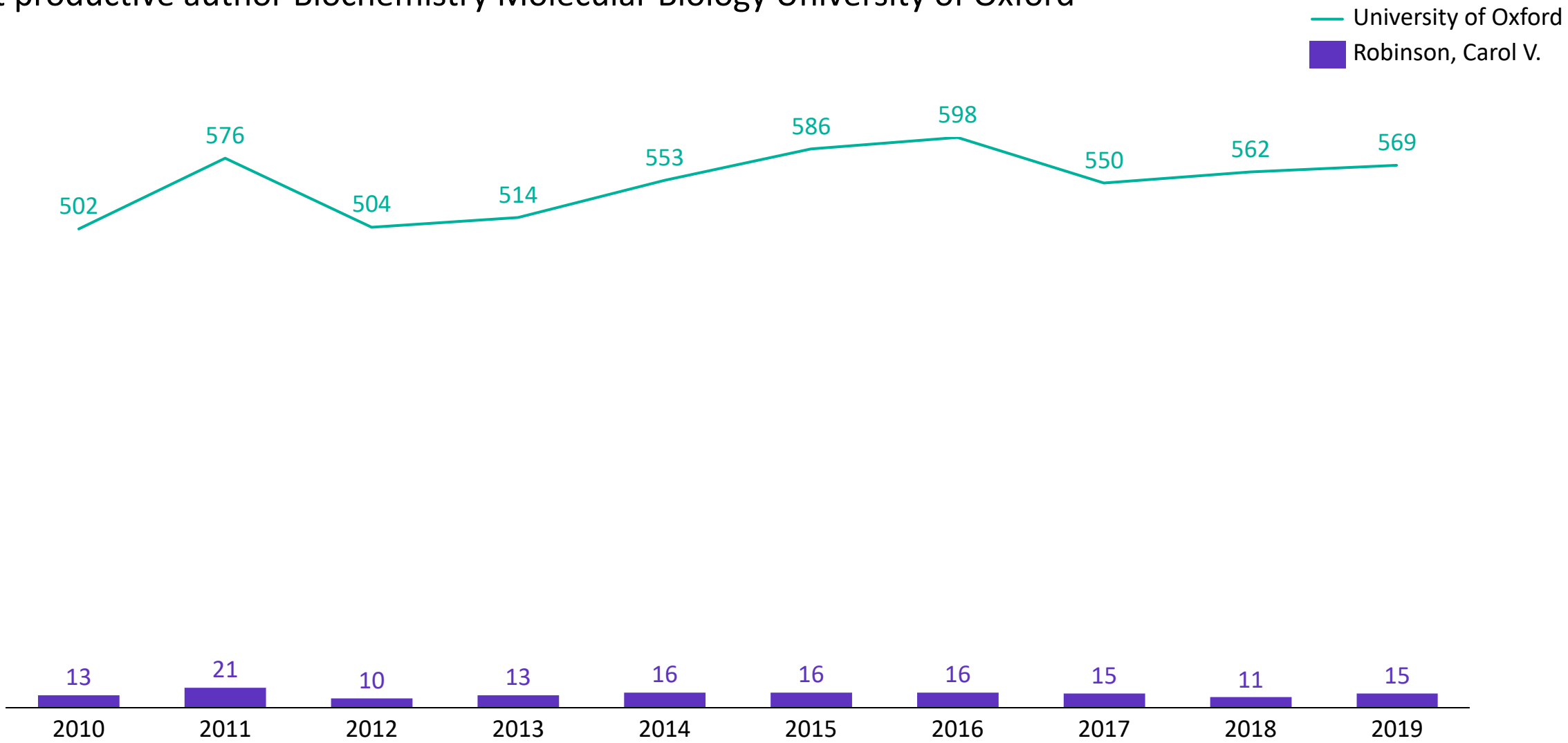
View full Citation Report





# Web of Science documents

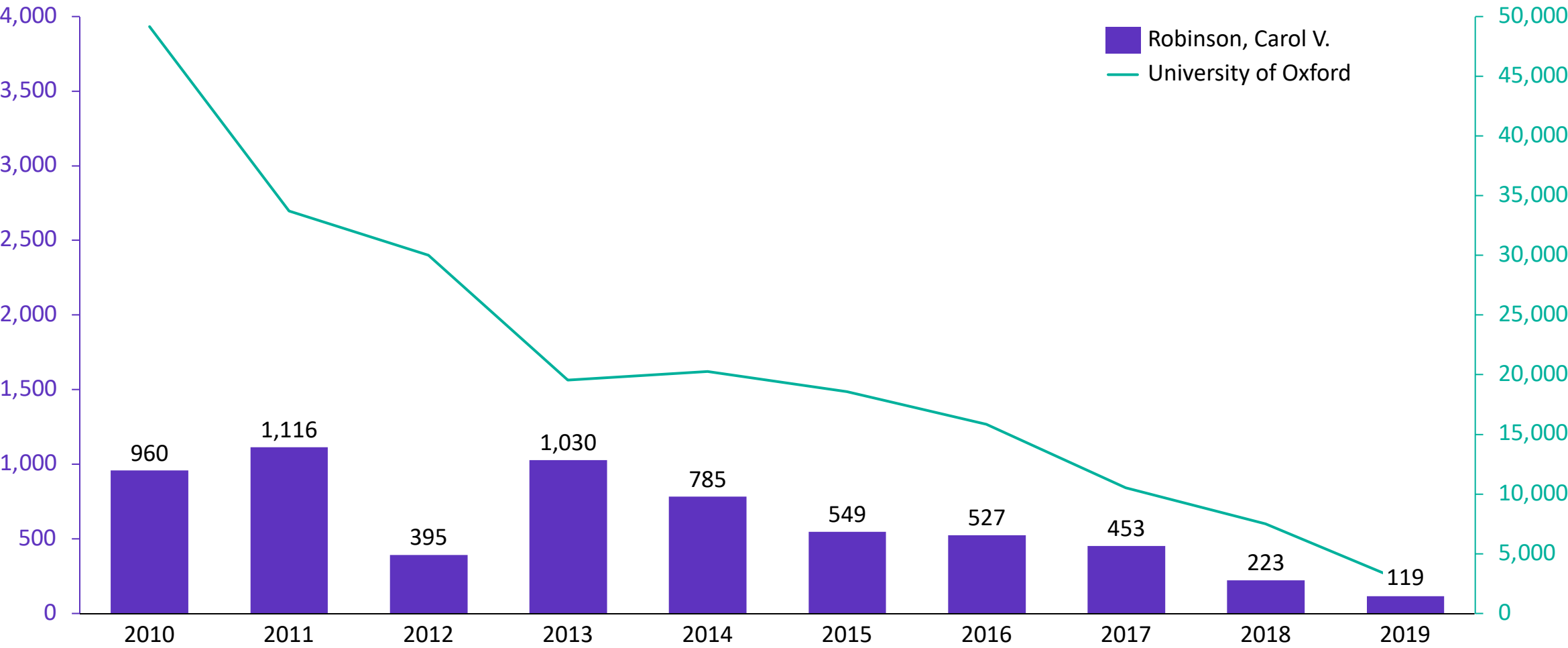
Most productive author Biochemistry Molecular Biology University of Oxford





# Times Cited

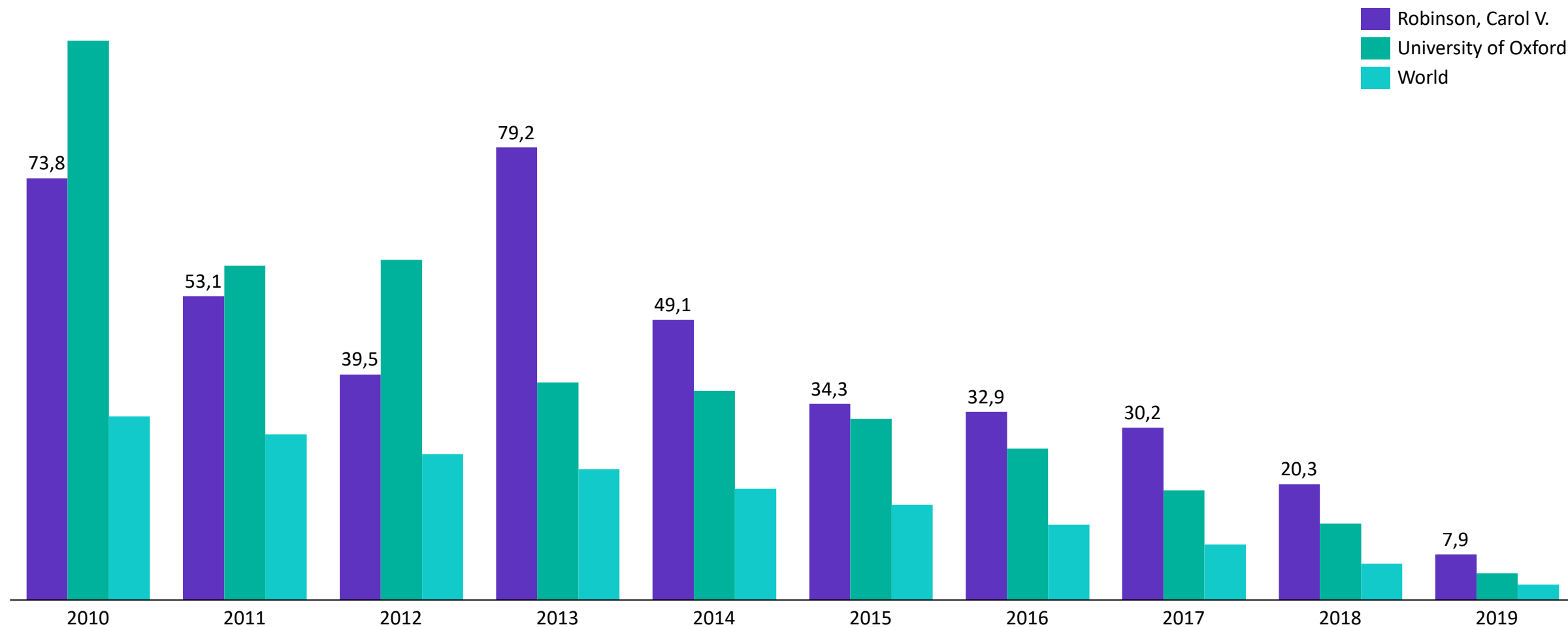
Biochemistry Molecular Biology Author vs University of Oxford





# Citation Impact

Biochemistry Molecular Biology Author vs University of Oxford

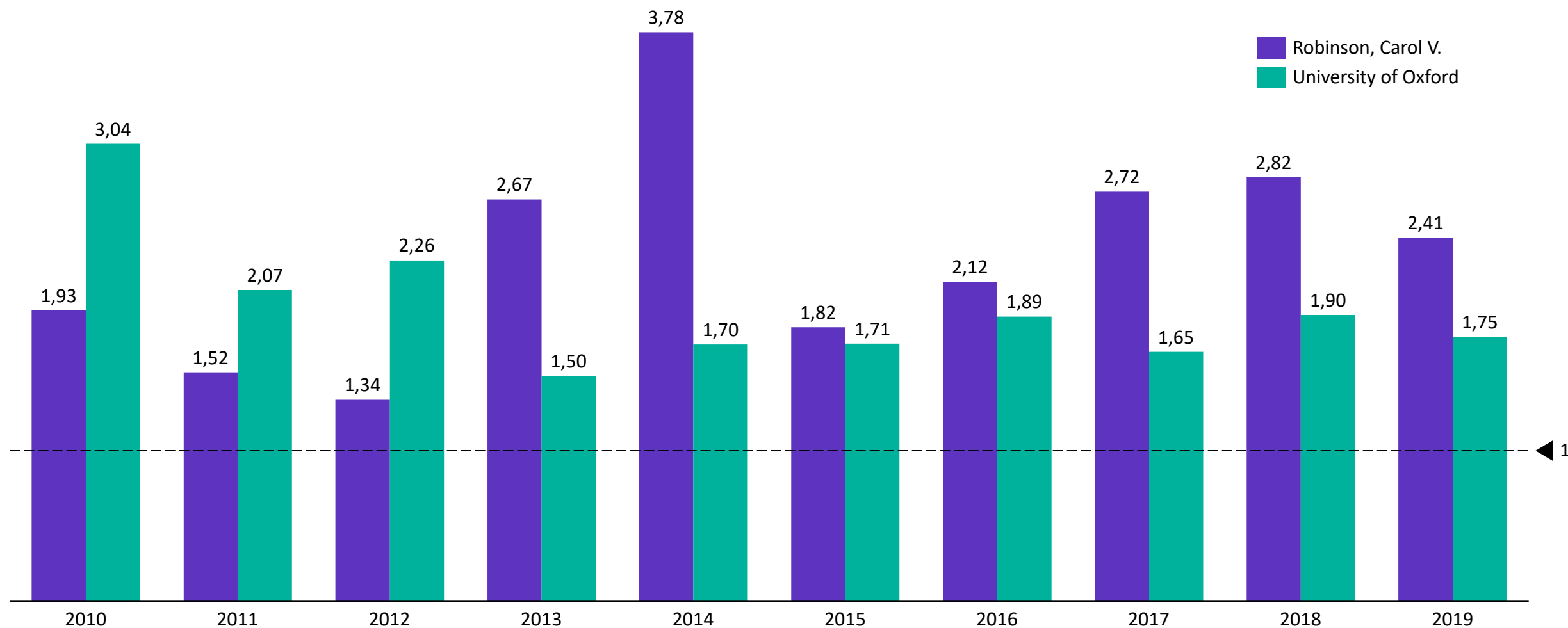






# Category Normalized Citation Impact

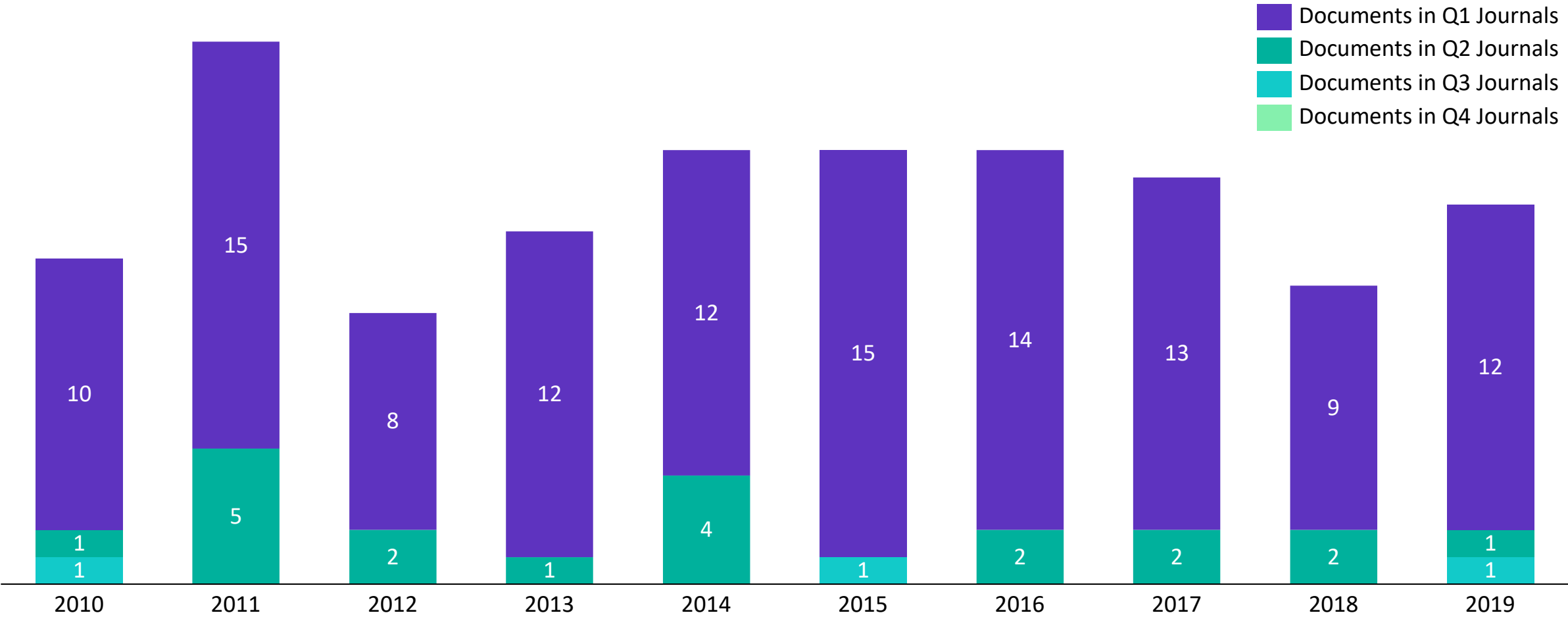
Biochemistry Molecular Biology University of Oxford 2010-2019





# Journal Impact Factor Documents

Biochemistry Molecular Biology Author Documents in Quartiles



# Thank You!

