



# ARQUS AL6 – 6.3 Impact Council meeting "Roadmap for the pathways to impact"

4th April 2022, 9:00-11:00, Padua

## **The Influscience Project**

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### The altmetric context

- Digital Transformation of Science Communication
- Political Framework: "responsible research", "ethics", "innovation", "co-creation", "open science", "citizen science"
- Demands for social impact and knowledge transfer

In countries such as the United Kingdom, social impact assessment initiatives have been developed, such as the Research Excellence Framework (REF), where scientists were allowed to use altmetrics to demonstrate the social impact of their research.



### The altmetric context

# altmetrics

# altmetrics: a manifesto

No one can read everything. We rely on filters to make sense of the scholarly literature, but the narrow, traditional filters are being swamped. However, the growth of new, online scholarly tools allows us to make new filters; these altmetrics reflect the broad, rapid impact of scholarship in this burgeoning ecosystem. We call for more tools and research based on altmetrics.

EUROPEAN COMMISSION



### **Next-generation metrics:**

Responsible metrics and evaluation for open science



# *Influ* Science

Scientists with social influence: a model to measure knowledge transfer in the digital society

# Hypothesis

The social influence of scientific research can be objectively quantified and measured using public social and digital platforms (altmetrics) and it has different facets and meaning. Depending on the characteristics of the platforms where it is disseminated and the type of public who accesses the information.

# Aim

To create and validate a multidimensional model (Twitter, Policy Mentions, News Mentions and Wikipedia) to measure the social influence of Spanish researchers, which will be materialised with the creation of the open web platform: "influscience" and four sector analyses that scale from Spanish institutions to European countries. All of this is in line with the strategies of Spanish science and the European Union.





Financing Entities : Agencia Estatal de Investigación Duration: 01/10/2020-01/10/2022. Funding: 60.500€.



# Methodology

- The starting point is the collection of bibliographic data from Web of Science databases and from altmetric aggregator Altmetric.com to create a database that unifies publications and their social mentions
- 2) The publications with the greatest social attention will be detected and from there the most influential scientists will be standardized and identified, all of this both by area of knowledge and by social media, also taking into account multidisciplinary.
- 3) Finally, a compilation of complementary information will be carried out for sectorial studies, being especially relevant the analysis of Twitter accounts and the collection of scientific production and metrics from different European countries for the elaboration of a comparative analysis





# Data

Years: 2016-2020

Country: Spain

Web of Science documents: 406,621 Indexed in *Altmetric.com*: 238,508

Total mentions: 3,596,296 mentions

# Fields perspective

Records were classified into the 22 research fields included in the Essential Science Indicators (ESI) provided by Clarivate. This classification is conducted at the journal level.



3.183.505 111.152



200.772

News mentions



7.785

Policy mentions

Twitter mentions

Wikipedia mentions



		Mentions		Descriptive Statistics			
	Publications	Sum	Percentage	Mean	Standard Deviation	Max	
Twitter mentions	208253	3183505	89.185%	13.421	96.987	15695	
News mentions	26167	200772	5.625%	0.8464	8.461	1429	
Facebook mentions	48824	99840	2.797%	0.4209	1.866	179	
Blog mentions	20750	38729	1.085%	0.1633	1.058	119	
Wikipedia mentions	5989	11151	0.312%	0.0470	0.859	208	
Google mentions	4518	9658	0.271%	0.0407	0.824	254	
Policy mentions	4569	7785	0.218%	0.0328	0.392	58	
Patent mentions	3111	5353	0.150%	0.0226	0.317	39	
Reddit mentions	3294	4822	0.135%	0,0203	0.240	27	
Video mentions	1863	2852	0.080%	0.0120	0.209	28	
F1000 mentions	2161	2563	0.072%	0.0108	0.127	9	
Peer review mentions	1231	2303	0.065%	0.0097	0.187	29	
QA mentions	186	218	0.006%	0.0009	0.043	11	
Weibo mentions	2	2	0.000%	0	0.003	1	
LinkedIn mentions	0	0		-		-	
Pinterest mentions	0	0	18-5-5-5	2.50		2.7	
Syllabi mentions	0	0	6	72.27		17 18 18 18 18 18 18 18 18 18 18 18 18 18	
Altmetric Attention	220288	330	66965	14,1944	89,881	12915	

Table 2. Distribution of publications and mentions between *Altmetric.com*'s different platforms for the Spanish of *Web of Science* documents during 2016-2020 period



# *Influ* Science

PROYECTO OBJETIVOS EQUIPO METODOLOGÍA PUBLICACIONES DESCARGAS NOTICIAS





INFLUSCIENCE

### CIENTÍFICOS Y CIENTÍFICAS SOCIALMENTE INFLUYENTES

UN NUEVO MODELO PARA MEDIR LA TRANSFERENCIA DEL CONOCIMIENTO CIENTÍFICO EN LA SOCIEDAD DIGITAL.

MÁS SOBRE INFLUSCIENCE →

Científic@s socialmente influyentes: un modelo para medir la transferencia del conocimiento en la sociedad digital (InfluCiencia) – PID2019-109127RB-100. Ver más sobre la financiación y partners

influscience.eu



# 



ranking.influscience.eu



# Ciencia Socialmente nfuyente\*

¿Por dónde quieres empezar?



LAS NUEVAS MÉTRICAS

INFLUCIENCERS ()

PAPERS 🏻

RANKINGS Q





4.456 Influsciencers including Rank Methods: Influratio 250 Influsciencer per field

Top10 InfluSciencers								
		Autor/a	InfluRatio	Wikipedia	Twitter	News	Policy	
	1.	Marina Pollan CARLOS III INST HLTH	14777	1	17971	893	7	
	<i>2</i> .	Beatriz Perez-Gomez	14713		17800	903		
	<i>3</i> .	Miguel A. Martinez-Gonzalez	14643	9	11659	1087	16	
	4.	Mark J. Nieuwenhuijsen ctr res environm epidemiol creal.	12809	34	7053	1099	FULL RANKING 78	



#### ← Home / InfluSciencers





Autoras y autores científicos con mayor impacto según las altmetricas.



#### Global Ranking

RANDOM PROFILES 250 RANKED IN Global Ranking



78th
Global Ranking
3956 InfluRatio



86th
Global Ranking
3813 InfluRatio



201st Global Ranking 2490 InfluRatio



218th
Global Ranking
2385 InfluRatio





HOSP CLIN BARCELONA

Top10 InfluSciencers Autor/a InfluRatio Wikipedia Policy Twitter Marina Pollan 14777 17971 893 CARLOS III INST HLTH Beatriz Perez-Gomez 14713 17800 903 CARLOS III INST HLTH Miguel A. Martinez-Gonzalez 14643 11659 1087 16 UNIV NAVARRA Mark J. Nieuwenhuijsen 12809 34 7053 1099 78 CTR RES ENVIRONM EPIDEMIOL CREAL Roberto Pastor-Barriuso 12595 17716 665 19 CARLOS III INST HLTH **Emilio Ros** 12329 7197 1166





# Marina Pollan

#### 臨床医学

Clinical Medicine

DESTACA TAMBIÉN EN

Social Sciences, General, Environment/Ecology, Pharmacology & Toxicology

CARLOS III INST HLTH

Madrid / España

ORCID

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SOCIAL SCIENCES, GENERAL

Web of Science ResearcherID

https://publons.com/researcher/M-3259-2014









53
Indexed Publications in Altmetrics

Social Sciences.

General & Toxicology

**MENTIONS DATA** 

MENCIONES POR SUS ÁREAS DE INVESTIGACIÓN

CLINICAL MEDICINE

Twitter 17.6K

Twitter 312 ENVIRONMENT/ECOLOGY Twitter

141

PHARMACOLOGY & TOXICOLOGY

Twitter

03

01

02



農業科学

Agricultural Sciences

O AREA PREVIEW

芸術と人文科学

Arts & Humanities

O AREA PREVIEW

生物学と生化学

Biology & Biochemistry

O AREA PREVIEW

ケミストリー

Chemistry

O AREA PREVIEW

臨床医学

Clinical Medicine

AREA PREVIEW

コンピューター

Computer Science

AREA PREVIEW

生物学と生化学

Economics & Business

AREA PREVIEW

ケミストリー

Engineering

AREA PREVIEW

エコロジー

Environment & Ecology

O AREA PREVIEW

地球科学

Geosciences

O AREA PREVIEW

免疫学

Immunology

O AREA PREVIEW

材料科学

Materials Science

O AREA PREVIEW

数学

**Mathematics** 

O AREA PREVIEW

微生物学

Microbiology

O AREA PREVIEW

分子生物学

Molecular Biology & Genetics

AREA PREVIEW

神経科学と行動

Neuroscience & Behavior

O AREA PREVIEW





Q

コンピューター Clinical Medicine

CLINICAL MEDICINE TOTAL MENTIONS / AUTORES Y PAPERS

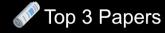
y	Twitter	W
	731.7K	9
	267K	<u> </u>



# Top 3 Personas InfluSciencers

	Autor/a	InfluRatio	Wikipedia	Twitter	News	Policy
1.	Marina Pollan CARLOS III INST HLTH	13253	1	17564	709	6
2.	Beatriz Perez-Gomez  CARLOS III INST HLTH	13086	I	17333	708	6
<b>3</b> .	Roberto Pastor-Barriuso	11375	1	17040	469	7





	Papers	InfluRatio	Wikipedia	Twitter	News	Policy	Altmetric.com
1.	Remdesivir for the Treatment of Covid-19-Final Report  Clinical Medicine  2020 Bronze, Green Published NEW ENGLAND JOURNAL OF MEDICINE	12915	2	13599	1429	20	13314
2.	Prevalence of SARS-CoV-2 in Spain (ENE-COVID): a nationwide, population-based seroepidemiological study Clinical Medicine  2020 Green Published, Bronze LANCET	10041	0	15695	394	5	9604
3.	Compassionate Use of Remdesivir for Patients with Severe Covid-19  Clinical Medicine  2020 Green Published, Bronze NEW ENGLAND JOURNAL OF MEDICINE	8701	2	11130	512	4	8494

#### RANDOM PAPERS 250 RANKED IN Clinical Medicine

230<sup>th</sup> Clinical Medicine
Global and National Burden
of Diseases and Injuries
Among Children and
Adolescents Between 1990
and 2013 Findings From the
Global Burden of Disease
2013 Study

106th Clinical Medicine

A Clinician's Guide for Trending Cardiovascular Nutrition Controversies Part II

INFLURATIO

840

97<sup>th</sup> Clinical Medicine

Genetic Etiology for Alcohol-Induced Cardiac Toxicity

INFLURATIO 879

126<sup>th</sup> Clinical Medicine

Clinical Portrait of the SARS-CoV-2 Epidemic in European Patients with Cancer

INFLURATIO

760



# New Project: Alt-Andalus

Application of the methodology to Andalusian Universities

alt-andalus



# **ARQUS**

- 1) Apply the Influscience methodology to ARQUS universities.
- To obtain indicators at the institutional level of the ARQUS universities for the four dimensions of social impact.
   Comparative study
- 3) Identify the most influential researchers in the universities. (Four indicators 22 Fields)
- 4) To identify the most influential articles in the universities. (Four indicators 22 Fields)

# Influ Science





# Please, join us in Granada

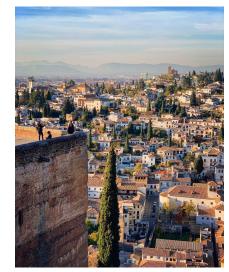


Photo by wise fox on Unsplash



Photo by Jorge Fernández Salas on Unsplash

### More info:

https://influscience.eu/novedades/i-encuentro-influcienc ia-ciencia-socialmente-influyente/

PID2019-109127RB-I00.

# Imflu Science

