Supporting the Impact of Health Sciences Research in Trinity

Niamh Brennan Research Informatics, Trinity College Dublin

September 15th, 2016, TBSI

Bibliometrics







InCitesTM delivers a world of research evaluation possibilities

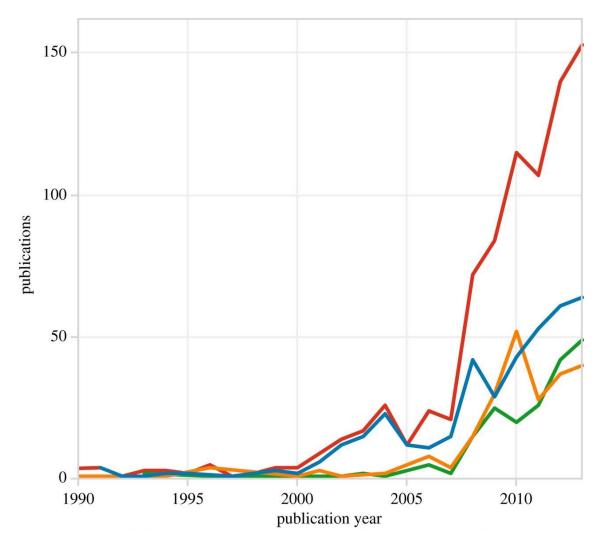
SciVal



THOMSON REUTERS

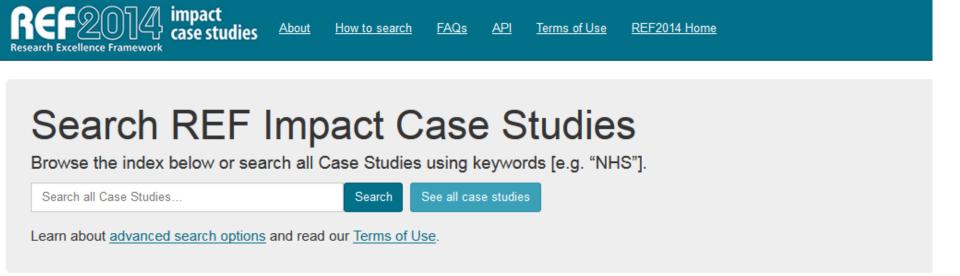
Institutional Data

From local CRIS (Current Research Information Systems)



Trinity's Research Support System is the sole source of data on research inputs & outputs by institutional units, schools, departments... linked to HR data...

Case Studies



Browse the index

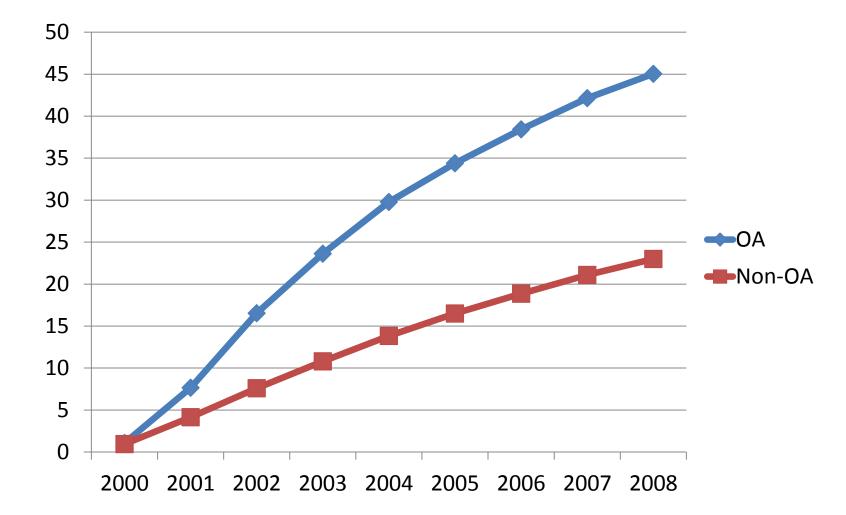
Submitting Institution	Unit of Assessment	Summary Impact Type	Research Subject Area	Impact UK Location	Impact Global Location	
Submitting Ir	nstitution			-	LE View by income category	2
Type institution name						
East	(453)	East Midlands	(435)			
Anglia Ruskin Universit	ty (32)	Bishop Grosseteste U	University (6)			
University of Bedfordsh	ire (24)	De Montfort University	y (15)			
University of Cambridge	<u>e</u> (227)	University of Derby	(21)			
Cranfield University	(23)	University of Leiceste	<u>r</u> (86)			
University of East Angl	<u>ia (64)</u>	University of Lincoln	(35)			

Open Access





Clinical medicine



Data: Gargouri & Harnad, 2010

Citations

Key Perspectives Ltd

Carlos Moedas, Commissioner for Research, Science and Innovation



2017: '...opening up by default all scientific data produced by future projects under the €77 billion Horizon 2020 research and innovation programme, to ensure that the scientific community can re-use the enormous amount of data they generate.'

- http://europa.eu/rapid/press-release_IP-16-1408_en.htm

ReCap: H2020 Open Data Requirements

All H2020 programmes & mandatory from January 2017

Proposal stage: *These questions are asked on the proposal form*:

- What type of data will the project generate?
- What kinds of standards will be used?
- How will be data be shared & made available for verification & re-use? If the data cannot be made available, explain why.
- How will the data be curated and preserved?

Project stage: *The following will be required for all funded projects:*

- Initial Data Management Plan:6 months after project begins
- Mid-term Data Management Plan (DMP)
- Final DMP

Post project...



EC's Open Research Data Pilot

Open Research Data Pilot

If your project is part of the Open Research Data Pilot (check your grant agreement), these are the minimal requirements:

• Write a data management plan. Use existing tools like Digital Curation Center's DMP online dmponline.dcc.ac.uk which contains templates for H2020.

• Deposit data in a data repository. Check out www.re3data.org, a global a registry of data repositories. If you cannot find one, use OpenAIRE/CERN's catch-all repository www.Zenodo.org.

• Provide information on the tools needed to use the raw data to validate the results (or provide the tools directly).

OpenAIRE compiles and maintains a list of resources that help you out in understanding and implementing the requirements of the Data Pilot.

For start you may download our Data Pilot factsheet at www.openaire.eu/services-factsheets and check out our support pages at www.openaire.eu/opendatapilot.

Can you opt in? Find the H2O2O areas that the projects are automatically part of the pilot at www.openaire.eu/opendatapilot. Projects in other areas can participate on a voluntary basis.

Can you opt out? With the right justification, projects may at any stage opt out of the Pilot. For more information, see www.openaire.eu/opendatapilot.

https://www.openaire.eu/services-factsheets

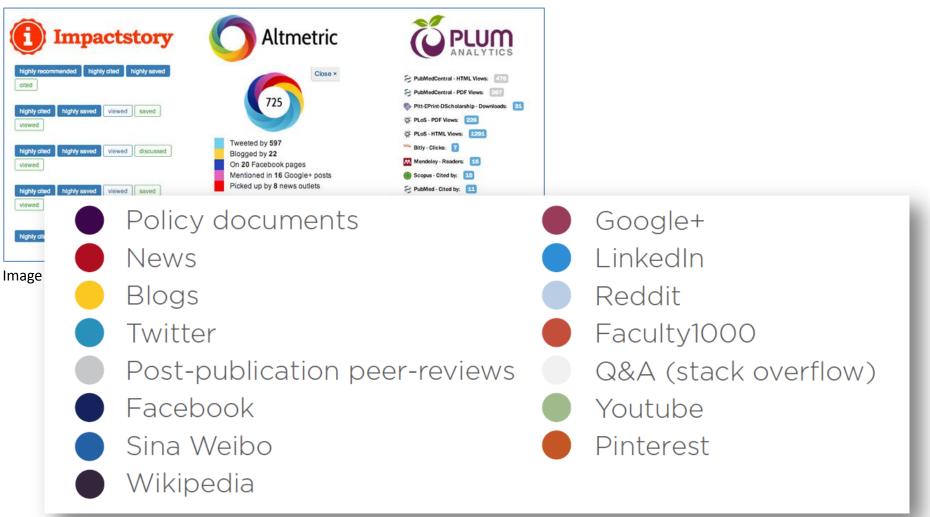
Ireland's Open Access Repository Network



- Ireland's OA Repository network: 26+ institutions
- All universities, many other research institutes
- National Open Access Portal: RIAN (<u>http://rian.ie</u>) RIAN: Higher Education Authority- funded



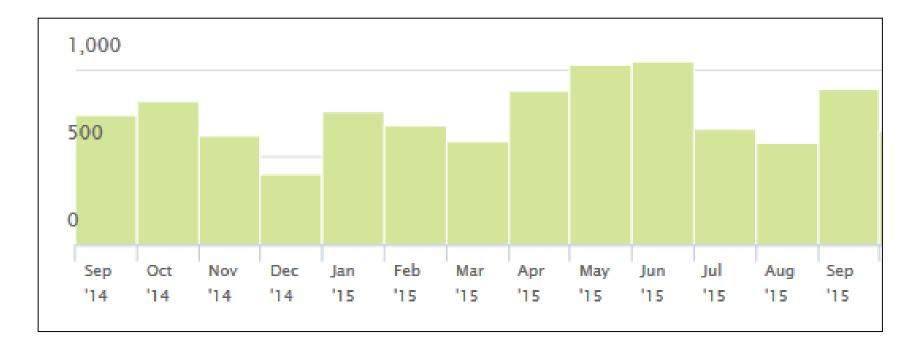
Alternative metrics for public engagement: tracking news media, social media, wikipedia references, policy paper references and more.



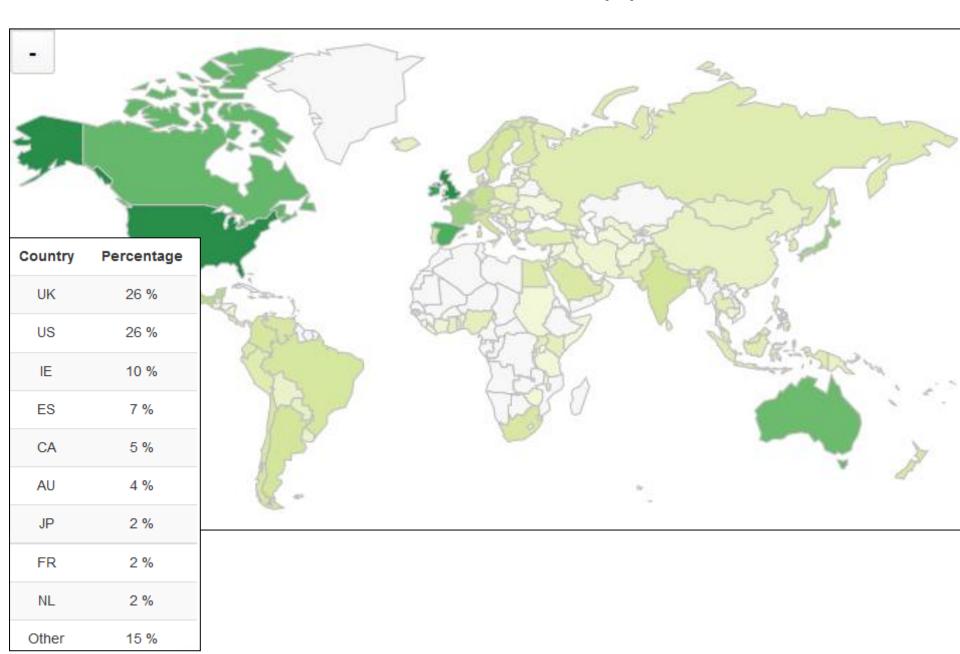
TCD FHS societal reach and influence

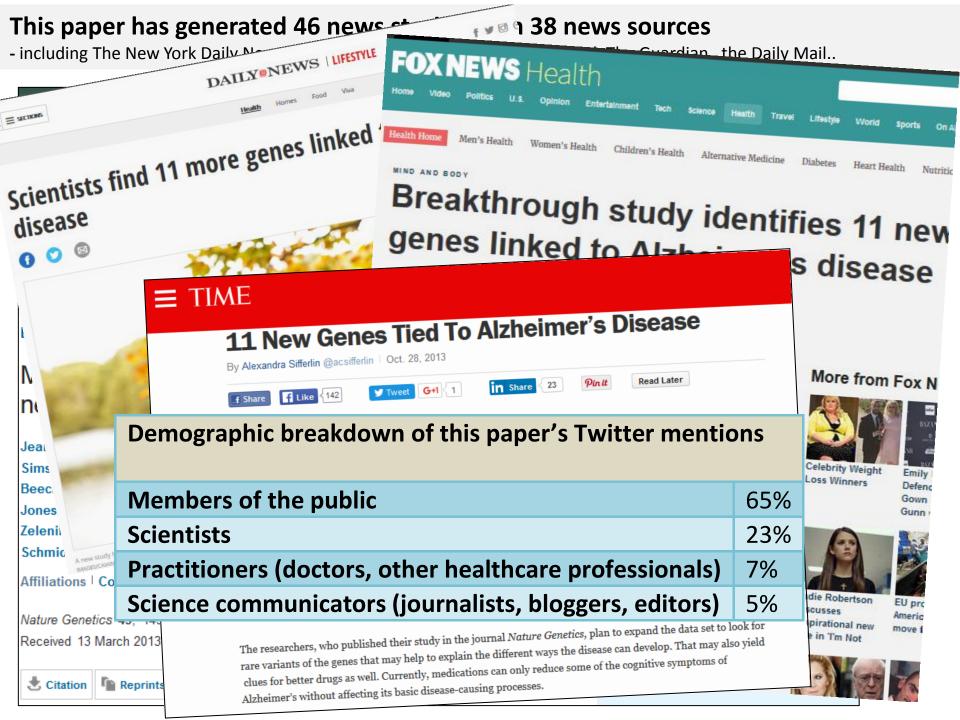
FHS papers have generated over 21,000 social media mentions, news stories, policy document citations or Wikipedia references over the past 2 years.

- 21,125 Overall mentions
- 1,033 News stories
- 17,925 Twitter mentions
- **13 Policy document references** (underestimate)
- 77 Wikipedia references



Location of 17,925 Twitter mentions of FHS papers 2014-2016





Interdisciplinarity

How Interdisciplinary are you? – the Nature Quiz

1. A cell is...

- a place to hold a prisoner
- a source of electrical energy, as in a battery
- the basic unit of a living organism
- a set of experimental conditions, often representing one of several treatment groups

http://www.nature.com/news/how-interdisciplinary-are-you-1.18362

"80% of the research case studies that were submitted [to the UK REF] to show significant impact were interdisciplinary in nature"

"One striking aspect is the impact interdisciplinary research can achieve"

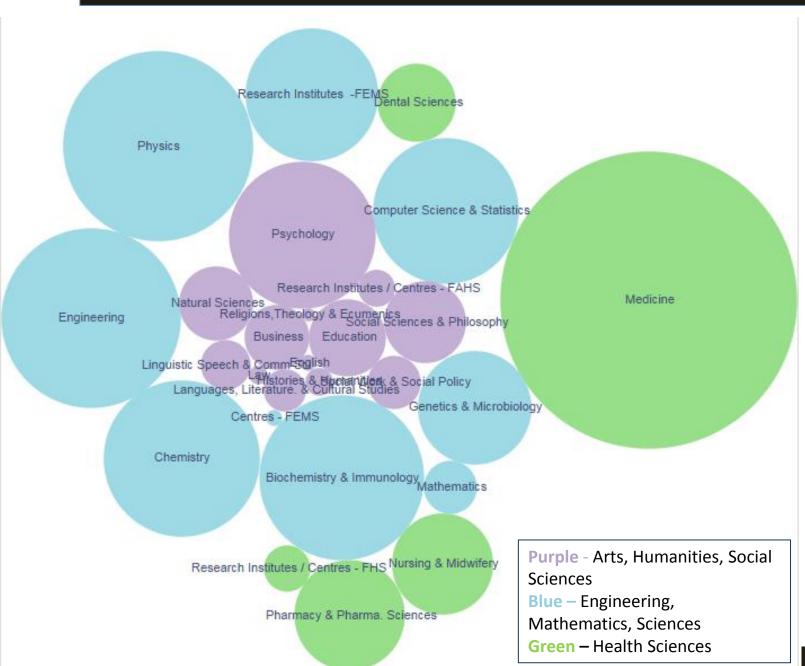
"...can lead to the generation of deeper and longer standing impact than would be possible for researchers working in isolation"

"INTERDISCIPLINARY RESEARCH IS ON THE RISE"

INTERDISCIPLINARY RESEARCH TAKES TIME TO HAVE AN IMPACT

SOME FIELDS ARE MORE INTERDISCIPLINARY THAN OTHERS ... AND SO ARE SOME COUNTRIES

Number of cross-school co-authored publications in TCD per school*.



Number of TCD Schools who have NOT coauthored a paper with àt least one other TCD school = **ZERO**

*Source: TCD RSS



Neuropharmacology

Volume 89, February 2015, Pages 193-203



First-in-class thyrotropin-releasing hormone (TRH)-based compound binds to a pharmacologically distinct TRH receptor subtype in human brain and is effective in neurodegenerative models

Julie A. Kelly ^{a,} 📥 🛯 Noreen T. Boyle ^{b, 1} , N	
Julie A. Kelly ^{a,} ▲· M, Noreen T. Boyle ^{b, 1} , N Chiara Stefanini ^d , Oliviero L. Gobbo ^e , Gaia A	
Walsh ^h , Alice Vajda ^a , Margaret M. Goggin ^a , David J. Bravden ^g John J. Callanan ^{k, g} . Keitl	School of Biochemistry & Immunology
O'Boyle ⁿ , Carvell H. Williams ^o , Orla Hardima	School of Medicine
Show more	School of Computer Science & Statistics
Choose an option to locate/access this	School of Genetics & Microbiology



try > International Journal of Geriatric Psychiatry > Vol 21 Issue 4 > Abstract



Research Article

Dementia in primary care: the first survey of Irish general practitioners

ssue

Suzanne Cahill^{1,*}, Maeve Clark¹, Cathal Walsh², Henry O'Connell³ and Brian Lawlor⁴

Version of Record online: 13 MAR 2006 DOI: 10.1002/gps.1464

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International Journal of Geriatric Psychiatry

Volume 21, Issue 4, pages 319–324, April 2006

School of Nursing & Midwifery School of Social Work & Social Policy School of Medicine School of Computer Science & Statistics



Contents lists available at ScienceDirect

Ageing Research Reviews

journal homepage: www.elsevier.com/locate/arr



Review

The impact of cognitive training and mental stimulation on cognitive and everyday functioning of healthy older adults: A systematic review and meta-analysis



Michelle E. Kelly^{a,*}, David Loughrey^a, Brian A. Lawlor^a, Ian H. Robertson^a, Cathal Walsh^b, Sabina Brennan^a

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> School of Psychology Research Institutes -FEMS School of Medicine School of Computer Science & Statistics

Mapping of cooccurrence of **keywords** brain mapping **In FHS papers** functional magnetic resonance imaging 2014-2015. morphis igle nucleotide emotion lymorphism ucleoù microglia ation interleukin 4 perception gait cytokine production psychology a studinal study C cross-sectional study animal cell essio questionnair amiddle aged unclassif nursing C consultation ssue scaffolds note cancer risk pathology aged hemistr health servic comorbidity collagen breast cancer essmel human tissue. synthesis and over-Ged -80 cell line, tumor emergency care treatment outcome antineoplastic agent cisplatin survival cancer staging postoperative complications lymphatic metastasis

brain mapping functional magnetic resonance imaging meuropsychologicapolymorphism, single nucleotide emotion single nucleotide polymorphism cognition microglia genetic association interleukin 4 perception gait aging physiology cytokine production psychology epression er analysigenetics macrophage longitudinal studyoung adult female blood glucose cross-sectional study gene expression animal cell guestionnaires mbrane protein imal tissue nursing irelandmiddle aged cene mut unclassified drug procedures consultation hone. notecancer risk pathology tissue scaffolds aged health service comorbidity chemistry collagen breast cancer outcome assessmentenosis human tissueistology synthesis aged, 80 and over cell line, tumor treatment outcome emergency care antineoplastic agent retrospective study cisplatin survival cancer staging nostoperative complications ymphatic metastasis

Check...

- Your research profile.
- Your ORCID ID.
- Your representation in bibliometric databases.
- Journal selection examine citation networks.
- Open Access- to publications AND data (where possible).
- Use citation tracking tools in bibliometric databases.
- Use alternative impact tools.
- Promote your work via social media and by every means possible.
- Conferences & meetings and parties! [e.g. Captain James Cook & cure for scurvy – almost 300 years after its discovery].

References

- Digital Science (March 2016) The Societal and Economic Impacts of Academic Research: international perspectives on good practice and managing evidence (Digital Research reports). Available at: <u>https://figshare.com/articles/Digital Research Report The Societal and Economic Impacts of Acade</u> <u>mic Research International perspectives on good practice and managing evidence/3117928</u>
- Jones, Alun, Cleere, Liam : Furthering the Research impact of UCD: Report of the Beyond Publications Committee. University College Dublin, 2014-05. Available at: <u>http://hdl.handle.net/10197/7292</u>
- Nature (2015), How interdisciplinary are you? [quiz]. Available at: <u>http://www.nature.com/news/how-interdisciplinary-are-you-1.18362</u>
- NISA. (2016a). Factsheet 16: Measuring impact and engagement in university research. Available at: www.innovation.gov.au/page/measuringimpact-and-engagement-university-research
- Van Norden, Richard (2015), Interdisciplinary research by the numbers, Nature, September 15 2015. Available at : <u>http://www.nature.com/news/interdisciplinary-research-by-the-numbers-1.18349</u>