Academic social networks: challenges and opportunities

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FRENCH NATIONAL INSTITUTE FOR AGRICULTURAL RESEARCH

- INRA produces scientific knowledge and works for economic and social innovation in the areas of food, agriculture and the environment.
- 8 488 employees, 213 research Units (2010)
- Institutional Repository Prodinra http://www.inra.fr/prodinra

Introducing myself: leading the Regional Scientific Information Team since 2002.

Co-leader of the scientific information technology group (research data, linked open data, open access technologies, *digital and social tool practices.*)

Since 2013, I have to answer questions about Academic Social Networks.



WHAT DEFINE A SOCIAL NETWORK FOR ACADEMICS ?

Main functionalities

- Find researchers or experts, be more visible (profil)
- Find relevant documents
- Disseminate your publications
- Create a network followings/followers
- Discuss topics

Aventurier, P., Cocaud, S. (2013). Les réseaux sociaux pour les scientifiques. Presented at La science 2.0. séminaire des professionnels IST, Seillac, FRA (2013/04/09-11).



Secondary functionalities

- Find a job (contact with companies or job offers)
- Manage and share bibliography
- Exchange with the intermediary of groups/communities or with people sharing the same interest: topics, skills expertise
- Evaluate or discuss document : Open peerreview, annotation
- Share informations (Questions/answer)
- Metrics / documents consultation

























ResearchGate





http://researchgate.net

http://academia.edu

http://mendeley.com

	Academia.edu	ResearchGate	Mendeley
Coverage	All	All	All
Network size	7.1 million	5 million	1.6 million
Full-text	1.6 million	45 million	200 million
Analytics	Profiles Doc views Download Countries Followers Following	Profiles Doc views, Download Request for full-text Countries Followers Following Q&A RG index Open Review Claim for citations	Doc views Readership stats
Collaborators	Yes	Yes	Yes
Job	Yes. Via job board. Can load CV.	Yes. List skills and Expertise.	Yes. Can load CV.
Funds	Capital and True Ventures	StartUp private funds (Bill Gates FaceBook)	StartUp→ Elsevier

Adapted from: Wee, Joan. "Research Network." http://fr.slideshare.net/ntunmg/research-network-30833267.

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	Academia.edu	ResearchGate	Mendeley	
Share files	Papers, data, Github	Papers, data, patents	Papers	
Link to OA or external URL	Yes	No. Except if you have load the full-text.		
Request full text button	No	Yes		
Access	Free	Free	Free Fee for premium / institutional version	
Privacy Profile	Public but Analytics can be private	Everyone/ mutual followers/ researchgate members / none	Everyone/ Followers/ Only me	
Privacy : notifications by e-mail	Many options	Many options	Many options	
Bibliographic functions	Import manual No export	Import manual No export	Import and export function	
adding publication data manually	У	у	у	
Biography and Curriculum		у	у	
adding publications (semi)automatically	Crossref + Microsoft AS+ PubMed + ArXiv	PubMed + IEEE + CiteSeer + RepEc + BMC	many search engines + import RIS or BibTeX	

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Who own the contents?

- Copyright article are behind pay wall and authors cannot put the fulltext into Social Networks
 - Elsevier asked to retire the papers from Aacademia.edu (Dec 2013)

Recently Elsevier has begun sending take-down notices to Academia.edu for articles that authors have posted where they are in violation of the copyright transfer agreement that the author has signed. Most authors sign such agreements with publishers.

- ResearchGate gives access to his database to stakeholders (CGU Researchgate) and will retire immediately documents on their demands
- Social Networks are not clear about who own original contents. Youtube like licence?
- Networks used to refers to Digital Millennium Copyright Act (DMCA)

<u>See http://scienceblogs.com/confessions/2013/12/10/around-the-web-elsevier-vs-academia-edu-vs-researchers/ or Voir aussi: http://urfistinfo.hypotheses.org/2596</u>

Business models



R&D institutions that can improve the quality of their decisions by 10-20%.' Price (Academia CEO) envisions developing an algorithm which "would tell an R&D company which are the most impactful papers in a given research area in the last 24 hours, 7 days, 30 days, or any time period'.

ResearchGate

offers universities and corporations the option to post job listings for free, but generates revenue by charging between 100 and 300 USD for increased visibility. Current job offers range from NASA to Novartis

will introduce a service that lets conference marketers pay to promote events and another for companies that want to advertise products, devices, books and services to scientists'.

"A Quick Glance at Business Models of Academic Social Networking Services." *Hybrid Publishing Lab Notepad*. Accessed November 21, 2014. https://hybridpublishing.org/2013/01/a-quick-glance-at-business-models-of-academic-social-networking-services/.





SOCIAL ACADEMIC NETWORKS PRESENTATION

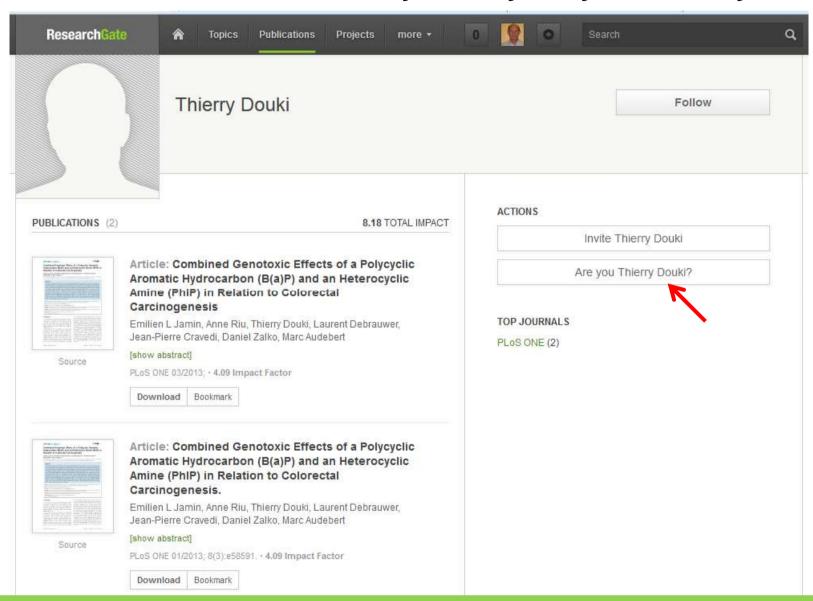
ResearchGate

Academia.edu

http://researchgate.net

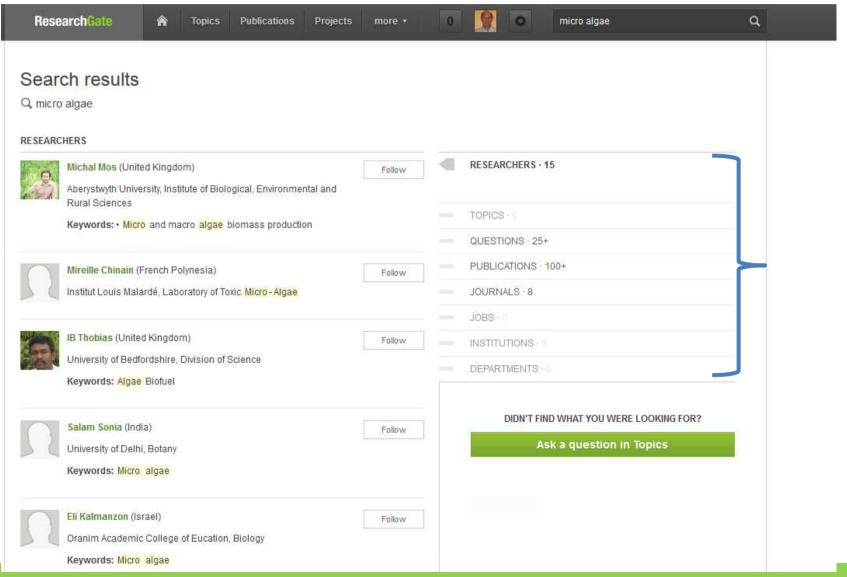
http://academia.edu

Profil created automatically → very easy to create yours

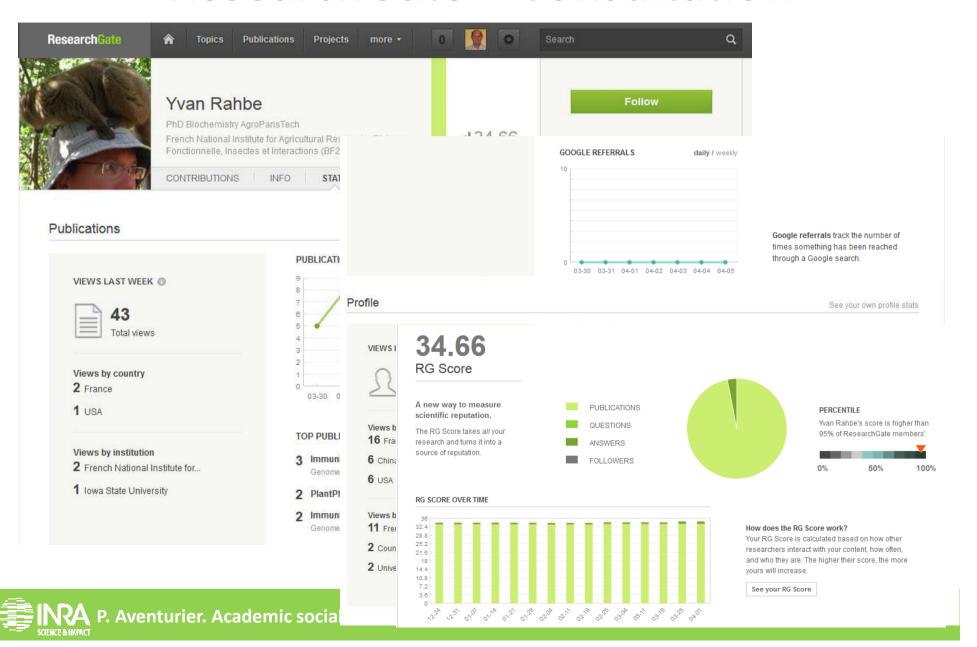




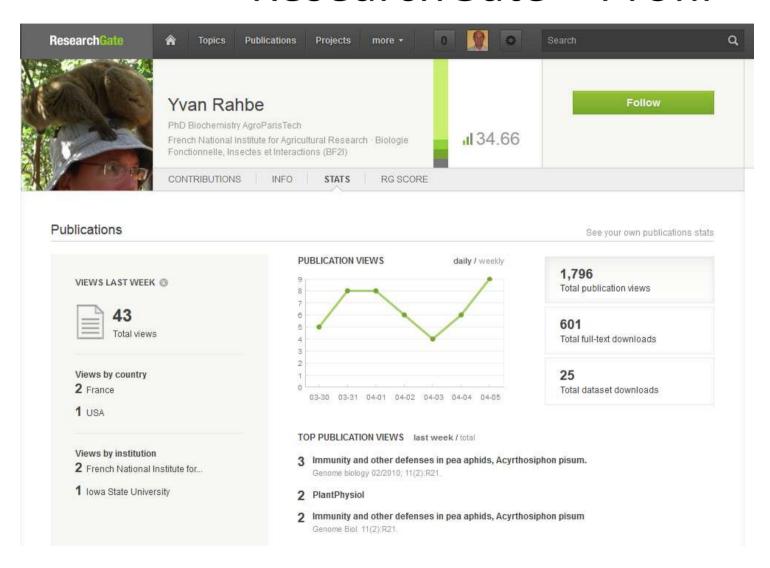
ResearchGate - Search



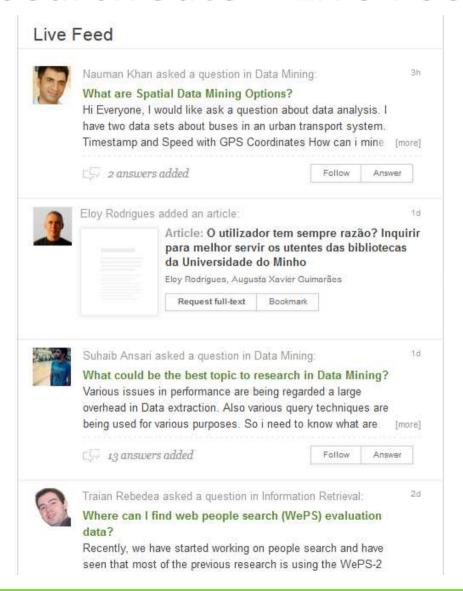
ResearchGate - Consultation



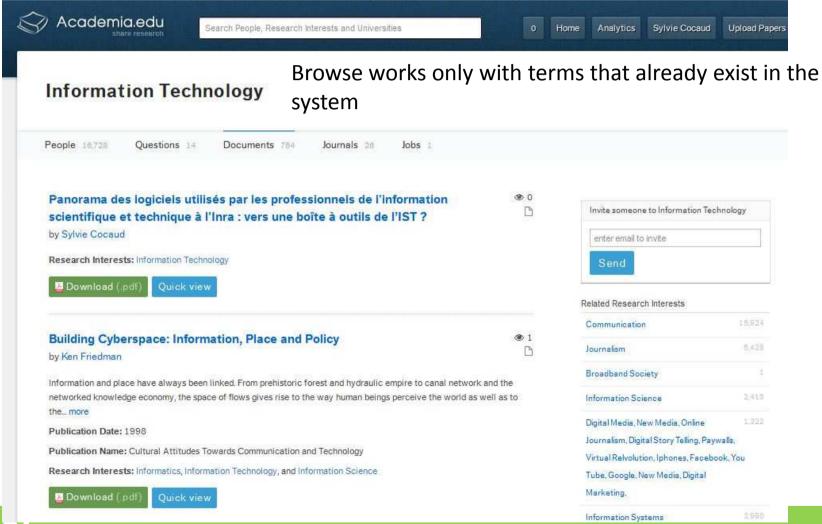
ResearchGate - Profil



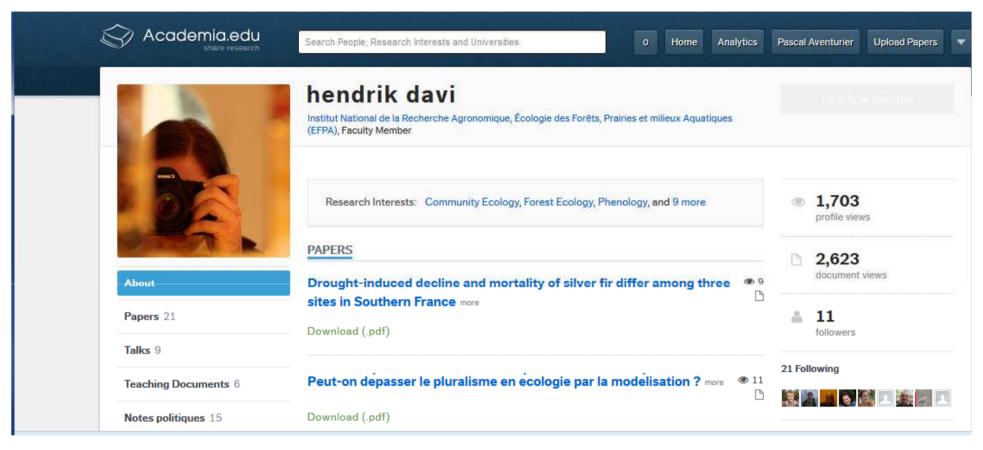
ResearchGate - Live Feed



Academia.edu search



Academia.edu profil



Identity, age, photo,

Research interests

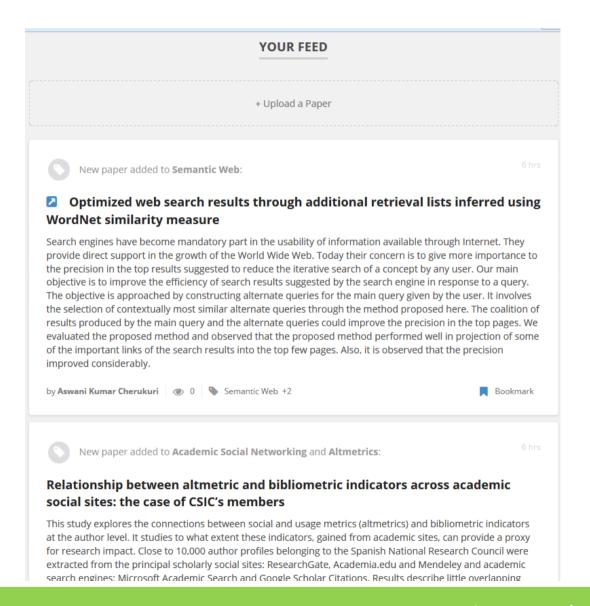
Title academic works, society membership

Awards

Professional address, Education, Languages



Academia.edu – Your Feed





SCIENTISTS AND SOCIAL NETWORK HOW RESEARCHERS USE THEM?

scholars in the open Q2 Which of these social media do you find most useful for your academic work? (More than one box may be ticked.) Answered: 686 Skipped: 25 None Facebook Twitter Google+ LinkedIn Academia.edu ResearchGate **Lupton, D. (2014)** Personal blog Multi-authored blog YouTube

Deborah Lupton (2014) 'Feeling Better Connected': Academics' Use of Social Media. Canberra: News & Media Research Centre, University of Canberra.



Nature 2014. Van Nordeen survey



Richard Van Nordeenr Nature http://www.nature.com/news/online-collaboration-scientists-and-the-social-network-1.15711



Nature 2014. Van Nordeen survey



Richard Van Nordeenr Nature http://www.nature.com/news/online-collaboration-scientists-and-the-social-network-1.15711





Social ACADEMIC NETWORKS

INTERESTS

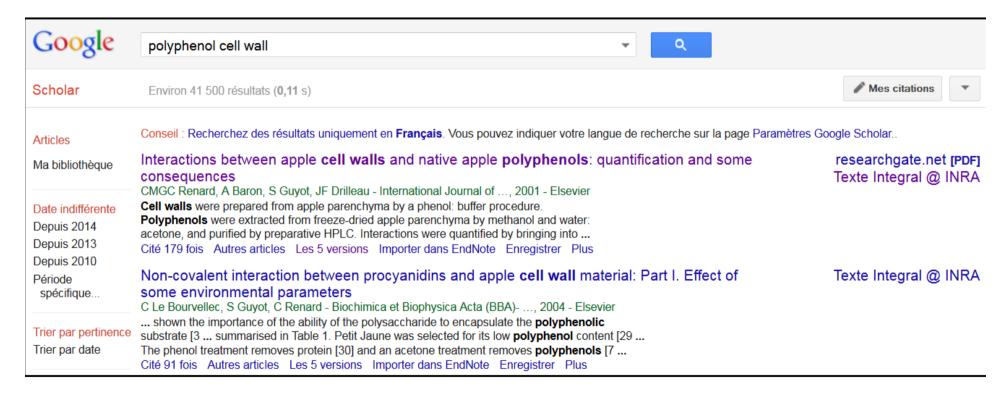
Why Social Networks for academics?

Mangan, Katherine. "Social Networks for Academics Proliferate, Despite Some Doubts." *The Chronicle of Higher Education*, April 29, 2012. http://chronicle.com/article/Social-Networks-for-Academics/131726/.

- Richard Price founder of Academia.edu
- "With networks like Twitter and Facebook, information whizzes around at laser speed," Mr. Price says, "whereas in science, and research in general, the average time lag is a year before a paper gets in a journal and is distributed to the rest of the world."
- With the Web, of course, distribution is instantaneous.
 "When you read a paper and want to comment, you'll be able to respond immediately," he says. "The conversation will take minutes and hours instead of months and years."

Enhanced visibility

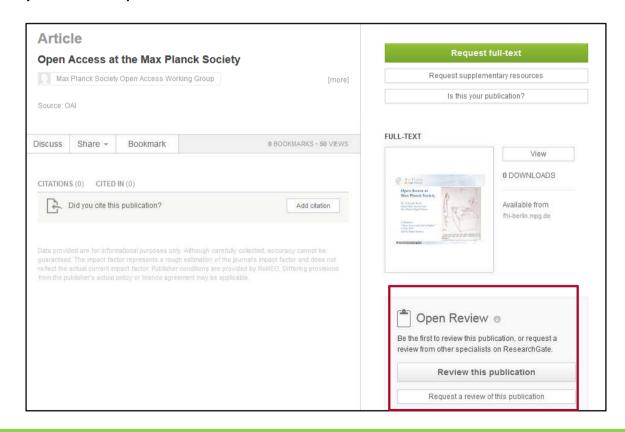
Google Scholar



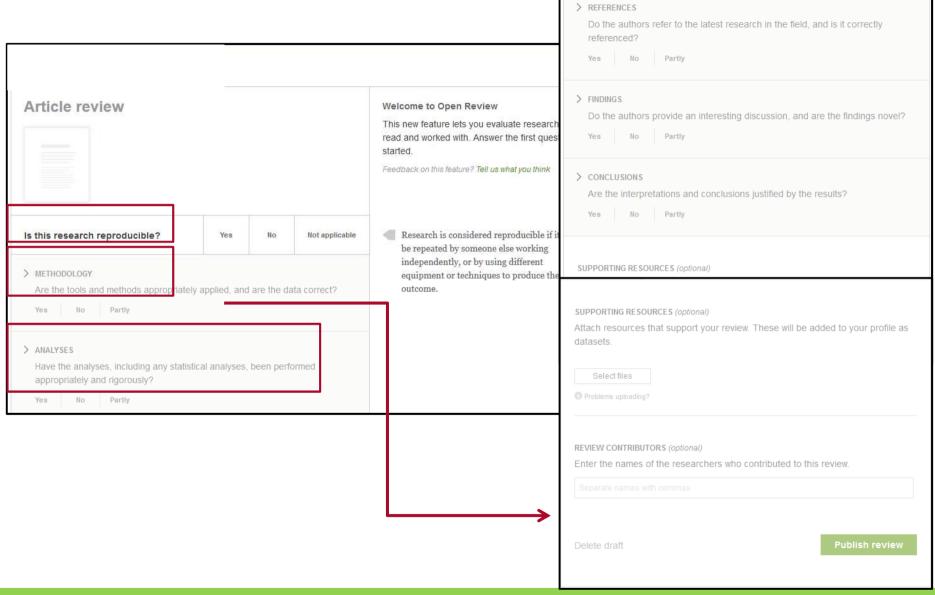
RG Open review

March 2014

- Notify authors when a review is occuring
- No Open review on its own publications
- No anonymeous reviews
- No possibility to refuse, but you can report abusive review

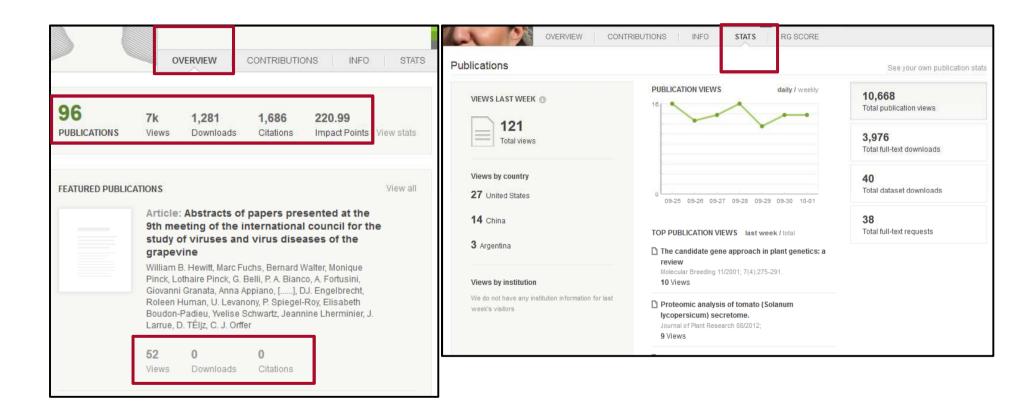


RG Open review



RG Metrics

Profile Metrics



Gain for researchers

- Find a job / a post doc
- Find new collaborators/teams
- Track relevant article to read
- Discuss new scientific hypotesis
- Valorize works for gain more citations

Jeroen Bosman, Bianca Kramer. "LibGuides. Research Impact & Visibility. Researcher Profiles." *Ultrecht University Library*. Accessed November 2, 2014. http://libguides.library.uu.nl/content.php?pid=310987&sid=3058269.

Gain for institution

- Valorize scientific and competence from institution
- Analyze data, new metrics
- Insure the e-reputation of the institution
- Strenghten international collaborations
- gain traffic on institutional website
- more impact for projects with scientists and development actors (technical exchanges)



Social ACADEMIC NETWORKS

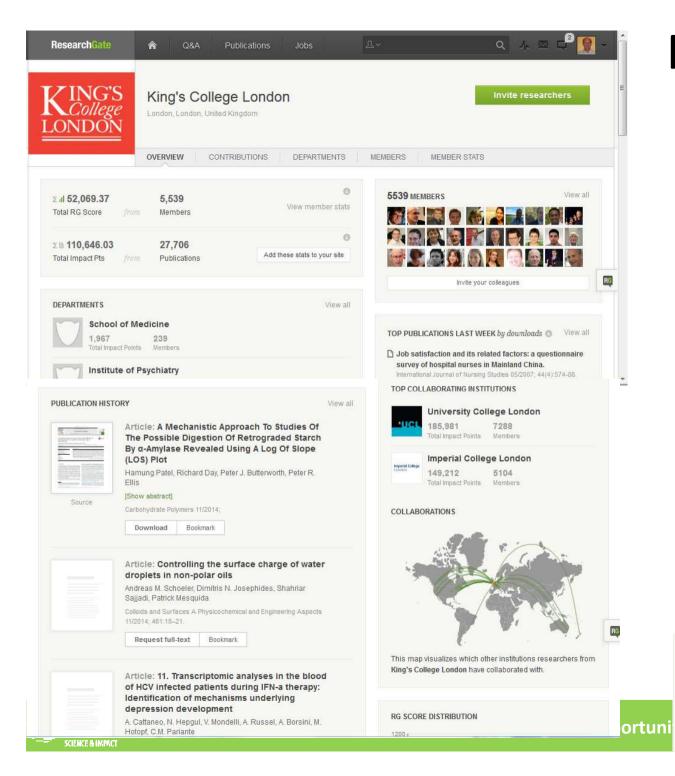
RISKS AND DANGERS

Researchers

- Time consuming
- Witch platform? difficult to choose no interoperability
- share it is to renounce to a competitive advantage
- Sustainability
- Not enough active users
- Use not optimized or inefficient
- Lack of management of digital identity
- Automatic solicitations by e-mail
- Content property
- Risk of jeopardizing one's career

Institutions

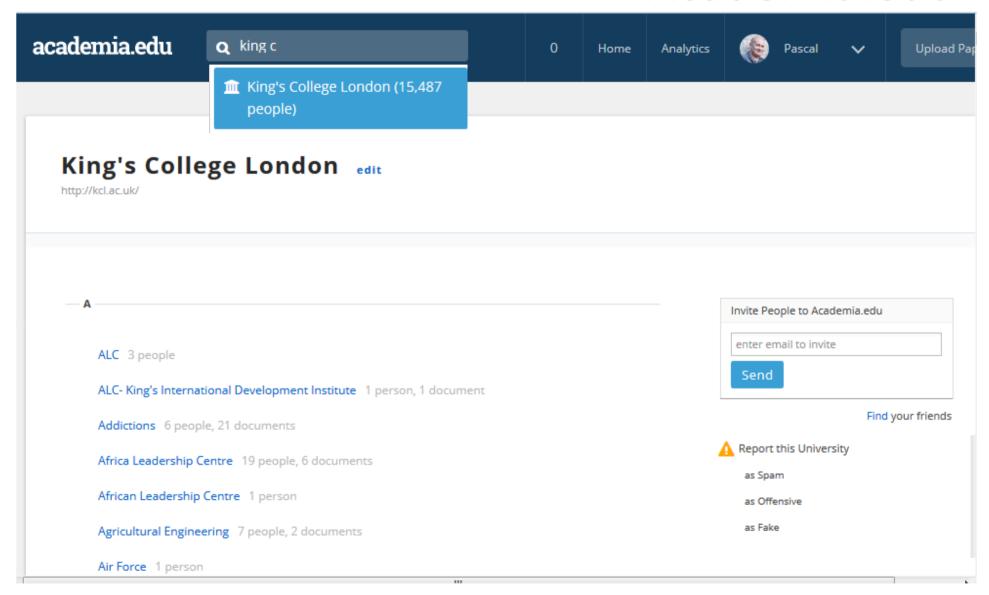
- Spread of knowledge who might be used by competitors
- Lack of control of the institution reputation
- Analyze by other institutions of the use of networks
- Tools multiplication
- Substantial Underuse of the institutions tools
- Sustainability



Researchgate page institution



Academia.edu





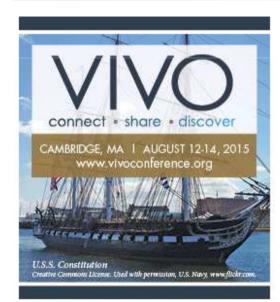
AN ALTERNATIVE : SOCIAL NETWORKS IN OPEN SOURCE

An interdisciplinary network

Enabling collaboration and discovery among scientists across all disciplines.

Find out how your institution can participate

- 1997, created by Univ Cornell.
- millions \$ of investments national network for american Universities in life science
- Open source
- Semantic web and linked data (agregation of existing data)
- Optimize the use of social networks into an institution : visibility, thematics, research materials
- Share researchers profiles into the Vivo network (all institutions if connected)
- Link to knowledge objects as institutional repositories
- Discovery tools



http://vivoweb.org
in test at INRA

Organizations

Events

lournals



People

AUTHOR1

Products

Positions

Research

- Directeur de Recherche, <u>Abeilles et Environnement</u>, <u>Santé des plantes et environnement</u>
- > Santé des plantes et environnement

Publications in VIVO 54 in the last 10 full years 1

Index

Log in

Search

selected publications

Home

academic article

<u>Characterization of the first honeybee Ca2+ channel subunit reveals two novel species- and splicing-specific modes of regulation of channel inactivation</u>. *Pflügers Archiv.* 465:985 – 996. 2013-01-01

Comparative study of Noserna ceranae (Microsporidia) isolates from two different geographic origins. Veterinary Microbiology. 162:670 – 678. 2013-01-01

Ecto- and endoparasite induce similar chemical and brain neurogenomic responses in the honey bee (Apis mellifera). BMC Ecology. 13. 2013-01-01

Flight behavior and pheromone changes associated to Nosema ceranae infection of honey bee workers (Apis mellifera) in field conditions. *Journal of Invertebrate Pathology*. 113:42 – 51. 2013-01-01

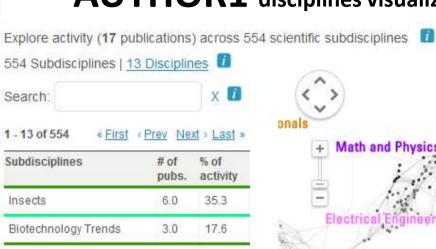
Flight behavior and pheromone changes associated to Nosema ceranae infection of honey bee workers (Apis mellifera) in field conditions. *Journal of Invertebrate Pathology*. 113:42–51. 2013–01–01

more...

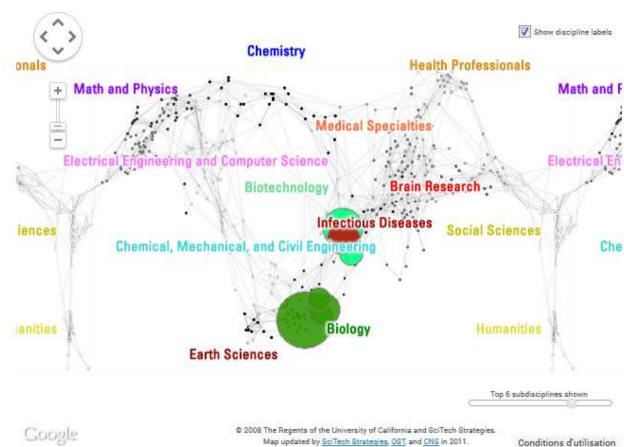


Home People Research Products Organizations Events Journals

AUTHOR1 disciplines visualization



Subuiscipililes	pubs.	activity	
Insects	6.0	35.3	
Biotechnology Trends	3.0	17.6	
Insect Physiology	2.0	11.8	
Veterinary Microbiology	2.0	11.8	
Ecology	1.0	5.9	
Genomics & Nucleic Acids	1.0	5.9	
Molecular Biology Methods	1.0	5.9	
Pest Management Science	1.0	5.9	
Acoustics	0.0	0.0	
Addictive Behavior	0.0	0.0	
Aeronautics & Astronautics	0.0	0.0	
Aerospace	0.0	0.0	
Affective Disorders	0.0	0.0	



mapped 53.13% of 32 publications

Save Unmapped Publications





CONCLUSION

Interactions of Tools

Social Media









Social Networking

ResearchGate



+ VIVO, Biomed experts ...

Discuss Science (hypothesis) before publication Meet Collaborators

Open Repository



-Self archiving once, read many -Sustainibility

Reference Management



Cris Current Information Research Systems - Team laboratory level

Network / OR Open repository / CRIS Current Research Information System

	Network (private)	Open Repository	CRIS
Perenity	Not sure (business approach)	Long term	Long term
Visibility	Individual visibility	Institutional visibility	Team/laboratory visibility
Editing list / outputs	Almost no possibility	Lot a possibilities For work For Ressearch assessment	-
interactions	A lot about contents and with researchers	Some social functions	with others systems Cerif (EuroCris) model representation of research entities, their activities / interconnections (research) and their (results)
Sharing documents	Share = upload the document in each site	Self archiving once, share many	Link with Open Repository

Trend: Researchers want to collaborate online (Van Noorden, Nature 2014)

But sharing alone is not enough. Knowledge only becomes useful when we can distinguish between relevant and less relevant information, when we can discuss aspects of the information, when we can annotate and improve on ideas, when we can devise new approaches and collaborate online.

open science: free and unrestricted access to information and use interactive media to collaborate online

Olijhoek, Tom - Scientific social networks are the future of science





Re academic platforms: "We're surrounded by honeypots... We haven't strategies / policies how to deal with them yet!" (@R_Koenig at #pdsc14)

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Photo Nijenhuis, P. Cold Wind Blowing. 2013. https://www.flickr.com/photos/peternijenhuis/8588133413/.

