Mike Buschman
Co-founder, Plum Analytics
August 5, 2014

@amichalek | @PlumAnalytics
Redefining: How Scholarship is Measured
Current state of Scholarly Measure

Journal Impact Factor 3.161
What impact has our research had in the past 18 months?
Researchers have Moved Online
## Sources of Data Exhaust

<table>
<thead>
<tr>
<th>Amazon</th>
<th>Figshare</th>
<th>Scopus</th>
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</thead>
<tbody>
<tr>
<td>Bit.ly</td>
<td>Github</td>
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<td>YouTube</td>
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Metrics

Categories

**USAGE**
(clicks, downloads, views, library holdings, video plays)

**CAPTURES**
(bookmarks, code forks, favorites, readers, watchers)

**MENTIONS**
(blog posts, comments, reviews, Wikipedia links)

**SOCIAL MEDIA**
(+1s, likes, shares, tweets)

**CITATIONS**
(PubMed Central, Scopus, patents)
Changing the focus on metrics

COUNTER

how much your university uses the collection

Article-level metrics and PlumX

how much the world uses your research
Metrics provide a Feedback Loop
Open Metrics → Open Science

Common genetic variation and the control of HIV-1 in humans.

<table>
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<th>Usage</th>
<th>Captures</th>
<th>Mentions</th>
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<td>Wikipedia - Links: 1</td>
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About this Article

**Author(s):** Jacques Félly, Dongliang Ge, Kevin V. Shianna, Sara Colombo, Bruno Ledergerber, Elizabeth T. Cirulli, Thomas J. Urban, Kunlin Zhang, Curtis E. Gumbs, Jason P. Smith, Antonella Castagna, Alessandro Cozzi-Lepri, Andrea De Luca, Philippa Easterbrook, Huldrych F. Günthard, Simon Mallal, Cristina Mussini, Judith Dalmau, Javier

**Related Groups:** University of Pittsburgh / Schools and Programs / Graduate School of Public Health / Infectious Diseases and Microbiology

PLoS genetics, ISSN: 1553-7390, Vol: 5, Issue: 12, Page: e1000791
Publication Year: 2009
Visualizing Impact: Plum Print

- Usage
  - Clicks: 26
- Captures
  - Readers: 47
- Mentions
  - Comments: 2
- Social Media
  - Shares: 5
  - Tweets: 25
  - Likes: 12
- Citations
  - Scopus: 12
  - PubMed: 4

[see details]
Chemistry in your kitchen
Author(s): Antony Williams

Community health nursing provides care alternatives.
Author(s): J Williams

Public Chemical Compound Databases
Author(s): Antony Williams
2013, DOI: 10.6084/m9.figshare.654769

Improving online chemistry one structure at a time
Author(s): Antony Williams
2013, DOI: 10.6084/m9.figshare.663617

ChemSPider - the Free Chemistry Database for the Community
Author(s): Antony Williams
2013, DOI: 10.6084/m9.figshare.663641

The Possibilities and Pitfalls of Internet-Based Chemical Data
Author(s): Antony Williams
2013, DOI: 10.6084/m9.figshare.663683
Group and Researcher Widgets

University of Pittsburgh
The University of Pittsburgh’s PlumX dashboard displays the research impact of researchers from a cross-section of departments throughout the university. Any contribution to the D-Scholarship Institutional Repository is available in PlumX. These contributions enable the per-institute and per-department views. Additionally metrics about the impact of articles in library published journals are also available.

Researchers

Recent Artifacts

- Prostaglandin E2 (PGE2) exerts biphasic effects on human tendon stem cells.
- The Library as Publisher
- A social scientific framework for social systems in online video games: Building a better looking for raid loot system in World of Warcraft
- Fiction Criticizing Reality: Abbas Kiarostami and the Cracked Windshield of Cinema
- Borderlands and Border-Crossers: Migrants and Boundaries in the Greater Caribbean, 1840-1940

see details

Michael Pinsky
Professor of Critical Care Medicine, Bioengineering, Anesthesiology, Cardiovascular Diseases, and Clinical & Translational Sciences

Artifact Summary

- Article: 341
- Chapter: 82
- Book: 58
- Other: 14
- Conference Paper: 7

Recent Artifacts

- Robust model-based quantification of global ventricular torsion from spatially sparse three-dimensional time series data by orthogonal distance regression: evaluation in a canine animal model under different pacing regimes.
- Addressing education debt: student and teacher perceptions of successful teaching of low-income African American students
- Clinical use of respiratory changes in arterial pulse pressure to monitor the hemodynamic effects of PEEP.
- Effects of norepinephrine on the renal vasculature in normal and endotoxemic cogs.
- Informal caregiver burden among survivors of prolonged mechanical ventilation.

see details
AN ELECTROCORTICOGRAPHIC BRAIN INTERFACE IN AN INDIVIDUAL WITH TETRAPLEGIA.


An electrocorticographic brain interface in an individual with tetraplegia.

Brain-computer interface (BCI) technology aims to help individuals with disability to control assistive devices and reanimate paralyzed limbs. Our study investigated the feasibility of an electrocorticography (ECoG)-based BCI system in an individual with tetraplegia caused by C4 level spinal cord injury. ECoG signals were recorded with a high-density 32-electrode grid over the hand and arm area of the left sensorimotor cortex. The participant was able to voluntarily activate his sensorimotor cortex using attempted movements, with distinct cortical activity patterns for different segments of the upper limb. Using only brain activity, the participant achieved robust control of 3D cursor movement. The ECoG grid was explanted 28 days post-implantation with no adverse effect. This study demonstrates that ECoG signals recorded from the sensorimotor cortex can be used for real-time device control in paralyzed individuals.
Patient Satisfaction with Private Physiotherapy for Musculoskeletal Pain

Sarah N. Casserley-Fesney
Martin Phelan
Fionnuala Duffy
Susan Roush, University of Rhode Island
Melinda C. Cairns
Deirdre A. Hurley

Document Type
Article

Date of Original Version
4-15-2008

DOI
10.1186/1471-2474-9-50

Abstract
Background:
Despite emphasis on patient-centred healthcare, healthcare professionals have been slow to use validated measurements of patient satisfaction in physiotherapy practice. The aim of this cross-sectional survey was to measure patient satisfaction with private physiotherapy in Ireland, for patients with musculoskeletal pain, using a previously validated survey instrument.

Methods:
A multidimensional patient satisfaction questionnaire 'PTOPS', which assesses

Citations
Scopus: 15
PubMed: 2

Usage
Clicks: 5
PDF Views: 105
Abstract Views: 223
Research output is more than articles…
Measure all of it
Beyond the Journal Article

- Articles
- Blog posts
- Book chapters
- Books
- Cases
- Clinical Trials
- Conference Papers
- Data Sets
- Figures
- Grants
- Interviews

- Letters
- Media
- Patents
- Posters
- Presentations
- Reports
- Source Code
- Theses / Dissertations
- Videos
- Web Pages
Identity By Design, November 26, 2008

By D. S. Johnson (Oklahoma) - See all my reviews

Amazon Verified Purchase (What's this?)

This review is from: Identity by Design: Tradition, Change, and Celebration in Native Women's Dresses (Hardcover)

One of the best of its kind that I have seen in 20 years of researching primitive American artifacts. Detailed research, wonderfully clear photography, great descriptions, excellent documentation.
How does this help me?

Performing Research

Funding Research

Publishing Research
Given how **tight budgets** are around the world, governments are rightfully demanding effectiveness in the programs they pay for.

To address these demands, we need **better measurement tools** to determine which approaches work and which do not.”

Bill Gates
Gates Foundation Annual Letter 2013
NIH: The Competition for Research $$$

49,581 Applications

17% Success Rate

4 in 5 people do NOT get funded
Who Gets Funded?

- **Typically Funded**
- **“Gray Zone”**
- **Almost Always Funded**
- **Almost Never Funded**

Adapted from:
http://nuweb.neu.edu/nhe/insideview%20NSF.pdf
An opportunity for libraries and the office of research to work together
Funders are using PlumX

Paul Ashwood

Researcher from:
By Geography / USA / California / 7567
By Institution / University of California, Davis / 7567
By Portfolio / Biology / 7567
By Proposal Type / Trailblazer / 7567

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Thank You!
Citations are lagging indicators

- Scopus = 2
- Web of Science = 0
- Google Scholar = 8
- PubMed = 1

Photo credit: A. Wayne Vogl and Nicholas D. Pyenson / Smithsonian Institution.
An Adequately Robust Early TNF-α Response Is a Hallmark of Survival Following Trauma/Hemorrhage

An adequately robust early TNF-α response is a hallmark of survival following trauma or hemorrhage. This article discusses the importance of a robust TNF-α response in the context of trauma and hemorrhage, highlighting its role in the survival of patients. The article emphasizes the need for further research to understand the mechanisms behind this response and its potential implications for clinical practice.