

Mein Hamster, der Co-Autor

wissenschaftliches Publizieren und gute wissenschaftliche Praxis



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Laser Mikroskope Wissenschaftskommunikation

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Schönen Guten Tag!

Lampe mein Name, André Lampe, Laserphysik/Biochemie/WissKomm



Eine Initiative des Bundesministeriums
für Bildung und Forschung

Wissenschaftsjahr 2016 ★ 17

MEERE
UND OZEANE

PLÖTZLICH
WISSEN!

ploetzlichwissen.de

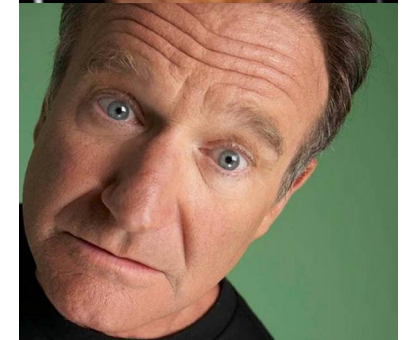
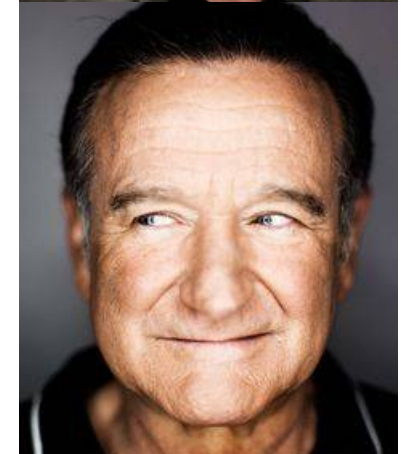
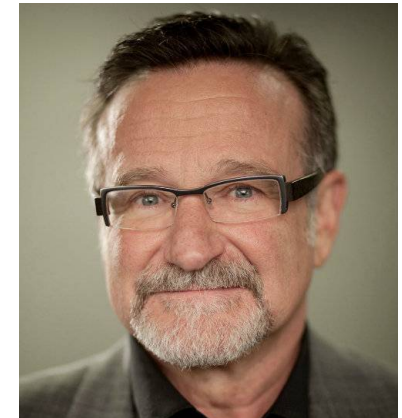
...was hat gute wiss. Praxis damit zu tun?

...also, dass ist doch logisch...!

1. Regeln guter wissenschaftlicher Praxis

1.1 Alle wissenschaftlich Tätigen und die Studierenden der Universität sind verpflichtet, folgende Regeln guter wissenschaftlicher Praxis zu beachten:

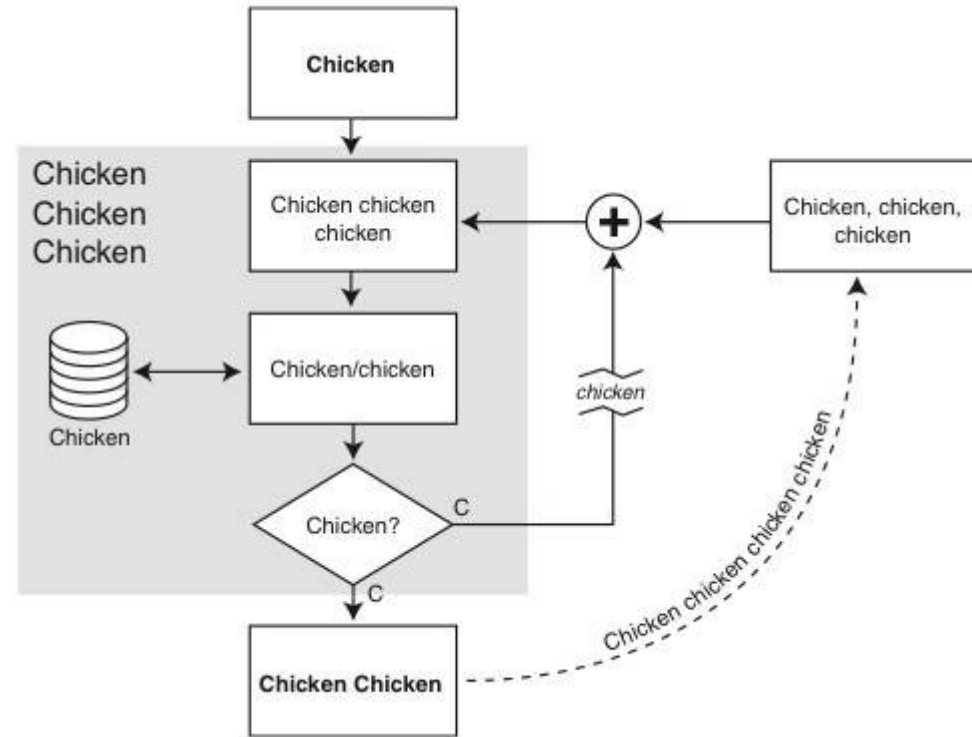
- a) Befolgen allgemeiner Prinzipien wissenschaftlicher Arbeit ("lege artis"),
- b) Vollständige Dokumentation der Resultate,
- c) Ehrlichkeit im Hinblick auf Beiträge von Kooperationspartnern/innen, Mitarbeitern/innen, Konkurrenten/innen (Ausschluß von Ehrenautoren-schaften),
- d) Zusammenarbeit und Leitungsverantwortung in Arbeitsgruppen, (z.B. regelmäßige gemeinsame Besprechungen der laufenden Arbeiten; Betreuung des wissenschaftlichen Nachwuchses),
- e) Sichere Aufbewahrung von Primärdaten für zehn Jahre in der Institution, in der sie entstanden sind,
- f) Verantwortung aller Autoren/Autorinnen für jeden Teil gemeinsamer wissenschaftlicher Veröffentlichungen.



Konkret heißt das für Publikationen

Ich zitiere hier die DFG, nicht irgendwen!

- die Methoden, verwendeten Materialien und Daten bzw. Ergebnisse müssen vollständig, wahrheitsgemäß und nachvollziehbar dargestellt sein. Dies gilt schon für die Ersteinreichung einer Publikation
- eigene und fremde Vorarbeiten sind vollständig und korrekt nachzuweisen durch Hinweise, Zitate und Danksagung



Although association preferences documented in our study theoretically could be a consequence of either mating or shoaling preferences in the different female groups investigated (**should we cite the crappy Gabor paper here?**), shoaling preferences are unlikely drivers of the documented patterns both because of evidence from previous research and inconsistencies with a priori predictions.

Konkret heißt das für Publikationen

Ich zitiere hier die DFG, nicht irgendwen!

- es muss klar sein, wer für die eingereichte Publikation verantwortlich ist (Autorschaft, Koautorschaft, korrespondierender Autor)



Andre Gaim
Nobelpreis Physik
2010
Ig Nobelpreis
2000



Purchase PDF Export

Physica B: Condensed Matter
Volumes 294–295, January 2001, Pages 736-739

Detection of earth rotation with a diamagnetically levitating gyroscope

A.K. Geim, H.A.M.S. ter Tisha

Abstract

Strong magnetic fields allow levitation of apparently nonmagnetic substances due to their weak but not negligible diamagnetic response of about 10^{-5} . Importantly, the diamagnetic force compensates gravity on the level of individual atoms and molecules and, therefore, can be used to mimic a continuous zero-gravity environment that, otherwise, is only achievable on board of a space station. Here we employ this earth-bound low gravity to demonstrate a simple mechanical gyroscope with sensitivity already comparable to that achieved by quantum and military gyroscopes. Our gyroscope can serve as a “shooting range” for the development of precision orbiting

... und für die Autorenschaft

Ich zitiere hier die DFG, nicht irgendwen!

DFG 1998, S. 19 – 20

Erläuterung zur Empfehlung 12

„Als Autoren einer wissenschaftlichen Originalveröffentlichung sollen alle diejenigen, aber auch nur diejenigen, firmieren, die zur Konzeption der Studien oder Experimente, zur Erarbeitung, Analyse und Interpretation der Daten und zur Formulierung des Manuskripts selbst wesentlich beigetragen und seiner Veröffentlichung zugestimmt haben, d. h. sie verantwortlich mittragen. [...]“



- X Einwerbung der Förderungsmittel
- X Beitrag wichtiger Untersuchungsmaterialien
- X Unterweisung von Mitautoren in bestimmten Methoden
- X Beteiligung an der Datensammlung und -zusammenstellung
- X Leitung einer Institution in der die Publikation entstanden ist

Zusammenfassung

Was gute wiss. Praxis mit dem wiss. Publizieren zu tun hat

1. „Regeln der Kunst“ befolgen (lege artis)!
2. Alles aufschreiben!
3. Autor ist nur wer schuftet!
4. Die Daten werden 10 Jahre aufbewahrt!
5. Du bist verantwortlich für deinen Mist!



state of the arts



Write it Down!



Was vollkommen ok ist...

„I need a whole salmon! For science!“



Neural correlates of interspecies perspective taking in the post-mortem Atlantic Salmon: An argument for multiple comparisons correction

Craig M. Bennett¹, Abigail A. Baird², Michael B. Miller¹, and George L. Wolford³

¹ Psychology Department, University of California Santa Barbara, Santa Barbara, CA; ² Department of Psychology, Vassar College, Poughkeepsie, NY;

³ Department of Psychological & Brain Sciences, Dartmouth College, Hanover, NH

INTRODUCTION

With the extreme dimensionality of functional neuroimaging data comes extreme risk for false positives. Across the 130,000 voxels in a typical fMRI volume the probability of a false positive is almost certain. Correction for multiple comparisons should be completed with these datasets, but is often ignored by investigators. To illustrate the magnitude of the problem we carried out a real experiment that demonstrates the danger of not correcting for chance properly.

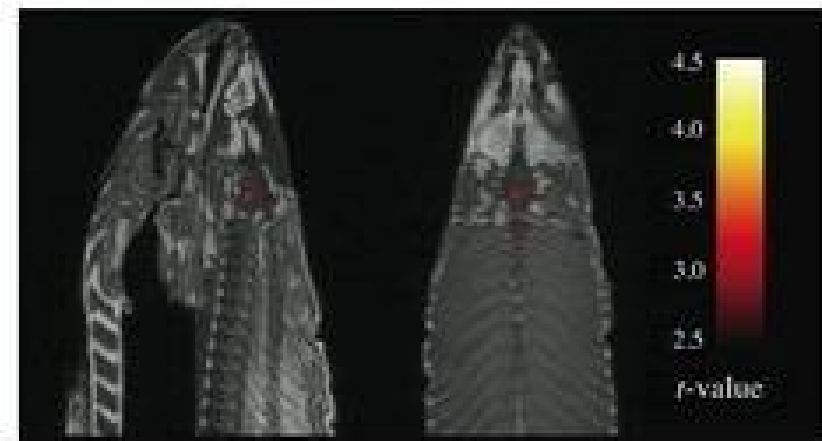
METHODS

Subject. One mature Atlantic Salmon (*Salmo salar*) participated in the fMRI study. The salmon was approximately 18 inches long, weighed 3.8 lbs, and was not alive at the time of scanning.

Task. The task administered to the salmon involved completing an open-ended mentalizing task. The salmon was shown a series of photographs depicting human individuals in social situations with a specified emotional valence. The salmon was asked to determine what emotion the individual in the photo must have been experiencing.

Design. Stimuli were presented in a block design with each photo presented for 10 seconds followed by 12 seconds of rest. A total of 15 photos were displayed. Total scan time was 5.5 minutes.

GLM RESULTS



A *t*-contrast was used to test for regions with significant BOLD signal change during the photo condition compared to rest. The parameters for this comparison were $t(131) > 3.15$, $p(\text{uncorrected}) < 0.001$, 3 voxel extent threshold.

Several active voxels were discovered in a cluster located within the salmon's brain cavity (Figure 1, see above). The size of this cluster was 81 mm³ with a cluster-level significance of $p = 0.001$. Due to the coarse resolution of the echo-planar image acquisition and the relatively small size of the salmon brain, further discrimination between brain regions could not be completed.

Was vollkommen ok ist...

„Balistische Pinguinkacke“

Polar Biology

December 2003, Volume 27, Issue 1, pp 56–58

Pressures produced when penguins pooh—calculations on avian defaecation

Authors

Authors and affiliations

Victor Benno Meyer-Rochow , Jozsef Gal

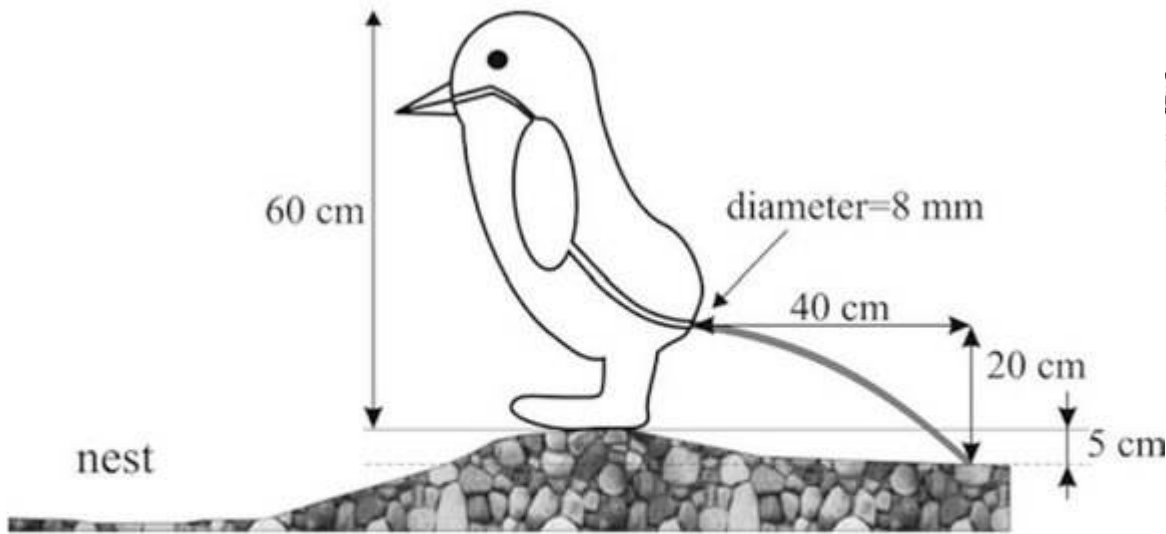
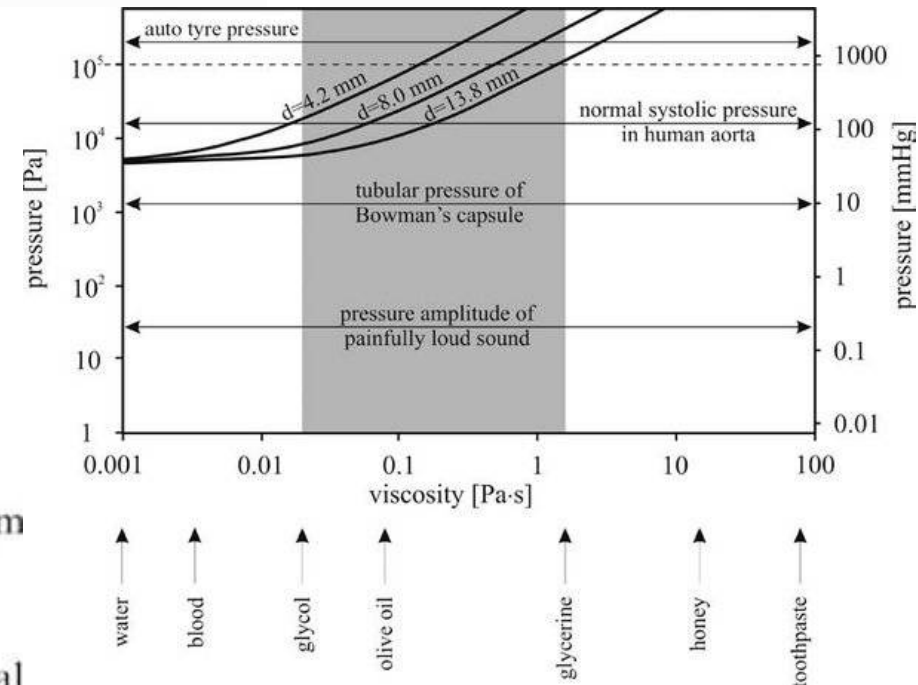


Fig. 1 Position of model penguin during defaecation and physical parameters used to calculate rectal pressure necessary to expel faecal material over a distance of 40 cm



Was vollkommen ok ist...

sich kurz fassen

Does the one-dimensional Ising model show intermittency?

D. Hajduković and H. Satz*

Theory Division, CERN, CH-1211 Geneva 23, Switzerland

Abstract:

No.

Was vollkommen ok ist...

sich kurz fassen

Bulletin of the Seismological Society of America

Vol. 64

October 1974

No. 5

IS THE SEQUENCE OF EARTHQUAKES IN SOUTHERN CALIFORNIA,
WITH AFTERSHOCKS REMOVED, POISSONIAN?

BY J. K. GARDNER and L. KNOPOFF

ABSTRACT

Yes.

Was vollkommen ok ist...

being a Goodman

A Few Goodmen: Surname-Sharing Economist Coauthors*

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August 4, 2014

Abstract

We explore the phenomenon of coauthorship by economists who share a surname. Prior research has included at most three economist coauthors who share a surname. Ours is the first paper to have four economist coauthors who share a surname, as well as the first where such coauthors are unrelated by marriage, blood or current campus.

Was vollkommen ok ist...

sich kreativ über die Reihenfolge einigen

proportion of prey in each area and not to the number per unit area. Moreover, the particular distribution of prey was chosen to make a general stability analysis easier and not to represent accurately prey distributions in the field. This model did, however,

* The order of authorship was determined from a twenty-five-game croquet series held at Imperial College Field Station during summer 1973.

† Henceforth, we refer to both as 'predators' unless otherwise stated.

Was vollkommen ok ist...

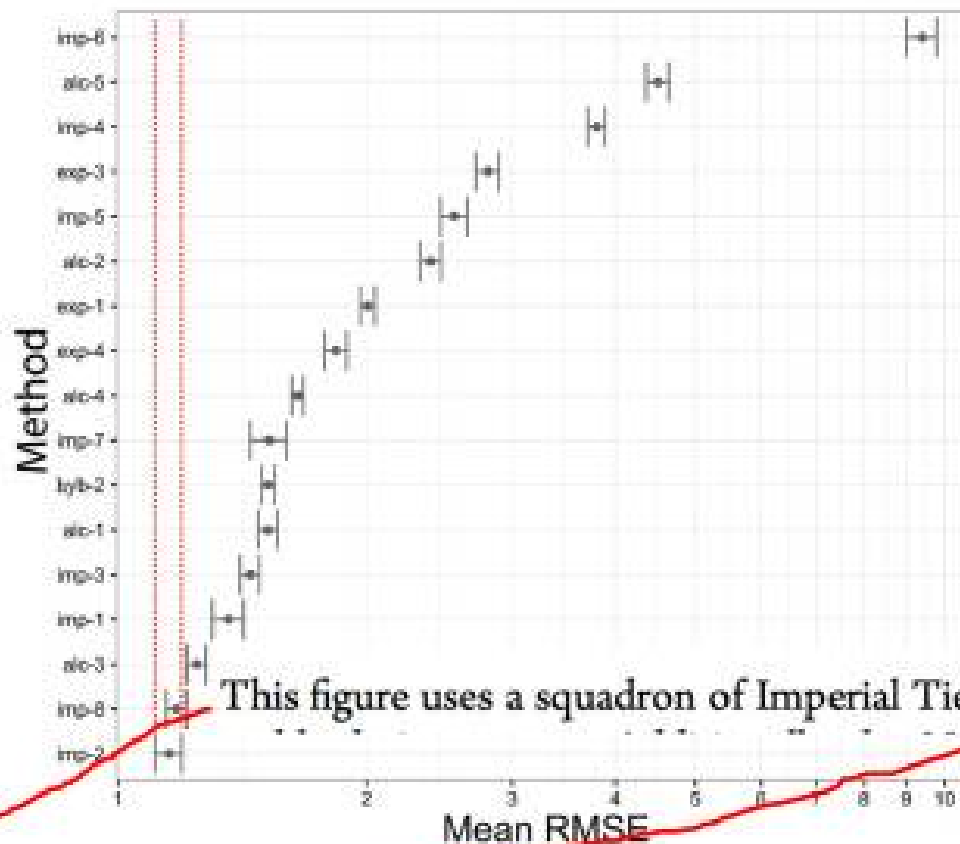
sich auch mal aufregen

Acknowledgments

I thank the National Science Foundation for regularly rejecting my (honest) grant applications for work on real organisms (cf. Szent-Györgyi, 1972), thus forcing me into theoretical work.

Was vollkommen ok ist...

einen Scherz machen, wenn man richtig zitiert



This figure uses a squadron of Imperial Tie Fighters⁸⁸ to d

Figure 1. This figure uses a squadron of Imperial Tie Fighters⁸⁸ to depict the mean root mean squared error (RMSE) for the 17 initial methods used in our ensemble design process. Additionally, the 95% confidence interval (based on standard error) for the expected mean RMSE is shown for each method. Thus, at 95% statistical confidence the true expected performance for each method is depicted according to the 100 iterations of the 2-fold cross-validation experiment we detail in Algorithm 2.

(88) Lucas, G. Star Wars. Episode IV. A New Hope. Lucasfilm, Twentieth Century Fox Film Corporation, 1977.

Was vollkommen ok ist...

popularisieren

Hall *Genome Biology* 2014, **15**:424
<http://genomebiology.com/2014/15/1/424>



COMMENT

The Kardashian index: a measure of discrepant social media profile for scientists

Neil Hall

Abstract

In the era of social media there are now many different ways that a scientist can build their public profile; the publication of high-quality scientific papers being just one. While social media is a valuable tool for outreach and the sharing of ideas, there is a danger that this form of communication is gaining too high a value and that we are losing sight of key metrics of scientific value, such as citation indices. To help quantify this, I propose the 'Kardashian Index', a measure of discrepancy between a scientist's social media profile and publication record based on the direct comparison of numbers of citations and Twitter followers.

Now consider Kim Kardashian; she comes from a privileged background and, despite having not achieved anything consequential in science, politics or the arts (although apparently she does have a scientific mind [1]), she is one of the most followed people on twitter and among the most searched-for person on Google. Her notoriety is said to have stemmed from an inadvertent internet release of a video featuring her and a boyfriend in a private moment. While her Wikipedia entry describes her as a successful businesswoman [2], this is due most likely to her fame generating considerable income through brand endorsements. So you could say that her celebrity buys success, which buys greater celebrity. Her fame has meant that comments by Kardashian on issues such as Syria have been widely reported in the press [3]. Sadly, her interjection

Was vollkommen ok ist...

popularisieren

nature
chemistry

ARTICLES
PUBLISHED ONLINE: 2014

A comprehensive overview of chemical-free consumer products

Alexander F. G. Goldberg¹ and CJ Chemjobber^{2*}

Manufacturers of consumer products, in particular edibles and cosmetics, have broadly employed the term 'Chemical free' in marketing campaigns and on product labels. Such characterization is often incorrectly used to imply — and interpreted to mean — that the product in question is healthy, derived from natural sources, or otherwise free from synthetic components. We have examined and subjected to rudimentary analysis an exhaustive number of such products, including but not limited to lotions and cosmetics, herbal supplements, household cleaners, food items, and beverages. Herein are described all those consumer products, to our knowledge, that are appropriately labelled as 'Chemical free'.

¹Department of Organic Chemistry, Weizmann Institute of Science, Rehovot 76100, Israel, ²3170 Road 40 V/2, Shell, WY 82441, USA.
*e-mail: chemjobber@gmail.com

NATURE CHEMISTRY | VOL 6 | 2014 | <http://dx.doi.org/10.1038/nchem.2419>

1

ARTICLES

NATURE CHEMISTRY

References

1. 'Chemical free' success: <http://www.fox.com>
2. 'Chemical free' chemistry set: <http://www.fox.com>
3. 'Chemical free' beauty: <http://www.fox.com>
4. 'Chemical free' eggs: <http://www.fox.com>

Acknowledgments

CJ Chemjobber thanks the American Chemical Society for providing this important topic in the modern chemistry biography. A.F.G.G. thanks the Azrieli Foundation for an Azrieli Postdoctoral Fellowship.

Author contributions

Both authors contributed equally to the main text.

Additional information

Correspondence should be addressed to chemjobber@gmail.com, including requests for reprints and permission information.

Competing financial interests

The authors declare no competing financial interests, though would have shared and 'Author Daily Statement' on principle if it was publicly traded.

NATURE CHEMISTRY | VOL 6 | 2014 | <http://dx.doi.org/10.1038/nchem.2419>

2

Aber mal ernsthaft: Was soll das jetzt alles?

Ich mag gute Fragen ;-)

gute
wiss.
Praxis

① BASICALLY,
SCIENTISTS GIVE
US THEIR WORK
FOR FREE...

② ...THEN WE HAVE
VOLUNTEER SCIENTISTS
REVIEW IT FOR US
FOR FREE...



③ ...THEN WE BUNDLE IT
ALL UP AND SELL IT
BACK TO THEM FOR
A PROFIT.

Profit*

Aber mal ernsthaft: Was soll das jetzt alles?

Ich mag gute Fragen ;-)

<i>operating profit</i>	<i>company</i>	<i>industry</i>
7%	Woolworths	supermarkets, pokies
12%	BMW	automobiles
23%	Rio Tinto	mining
35%	Apple	premium computing
34%	Springer	scholarly publishing
36%	Elsevier	scholarly publishing
40%	Wiley	scholarly publishing

*zum Glück gibt es immer mehr Ausnahmen: PLoS, PeerJ, etc.
(open access kommt ja später noch ;-)

Es gibt mehr Journale als man denkt!

Auch solche, nach denen man nicht sucht...

Journal of Unsolved Questions



All your results are good results!



Journal of Negative Results in BioMedicine

Was kann man tun?

...„kann“!

Deutsche Forschungsgemeinschaft

Verfahrensleitfaden zur guten wissenschaftlichen Praxis

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gute_wissenschaftliche_praxis/
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Deutsche
Forschungs-
gemeinschaft



Was sollte man tun?

Es gibt keinen Schlag der härter ist als der Ratschlag.

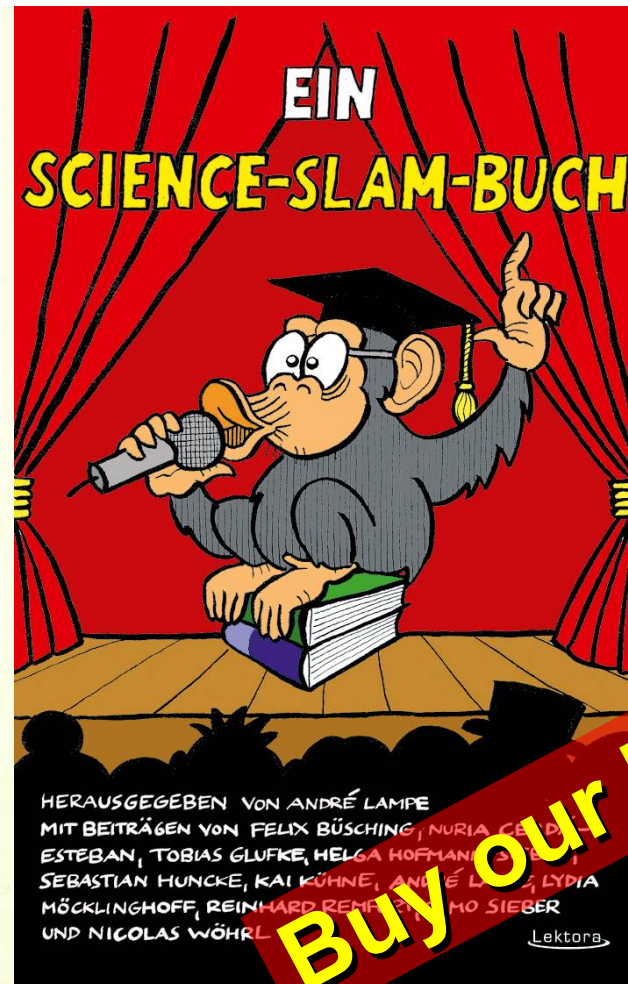


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Augenmaß

Danke fürs Zuhören!



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