

Preprints and Community Feedback

An alternative to traditional review

Damian Pattinson, PhD

VP of Content and Engagement, Research Square



About me



2004

- PhD Neuroscience at UCL

2008

- Postdoc at KCL

2012

- Editor at the BMJ
- Executive Editor of PLOS ONE
- Editorial Director of PLOS

2016

- Head of Innovation at Research Square

2019

- Head of Content and Outreach At Research Square

Perceptions of Peer Review

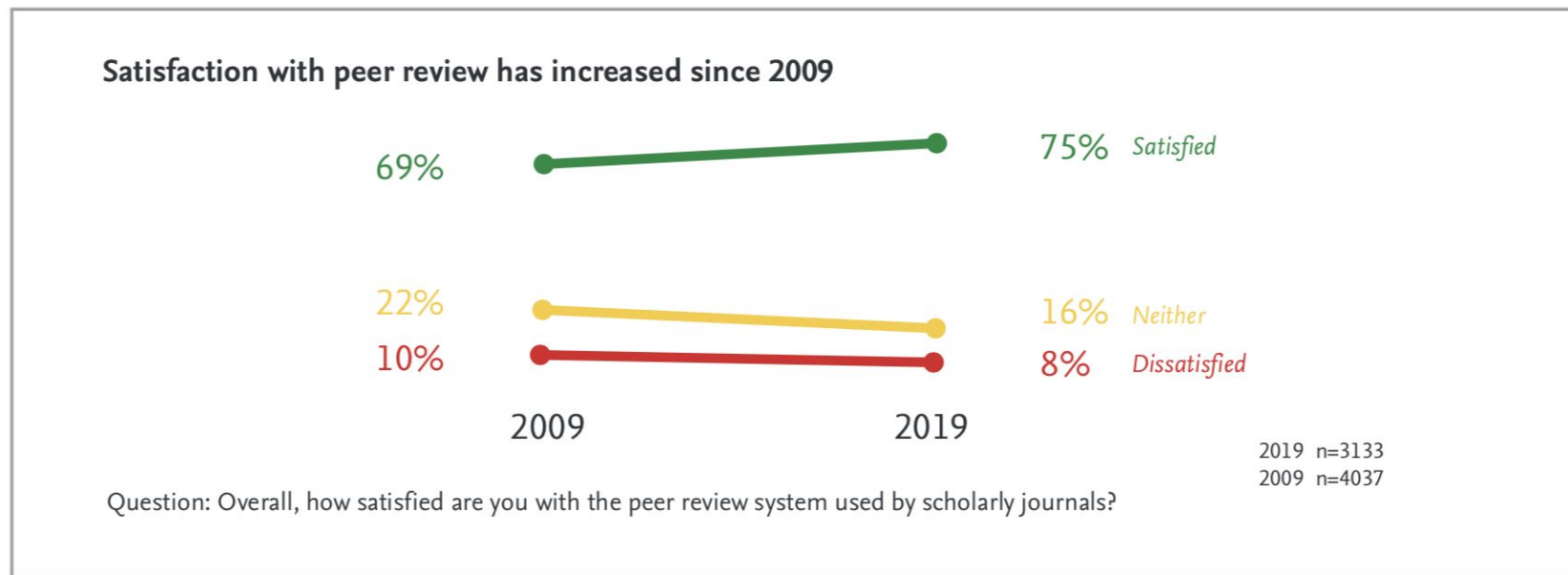


Figure 1: Researcher satisfaction rates with the peer review system – 2009 and 2019 figures.

From: *Quality, Trust and Peer Review: Researchers' Perspectives 10 Years On (2019)*
www.senseaboutscience.org

Perceptions of Peer Review

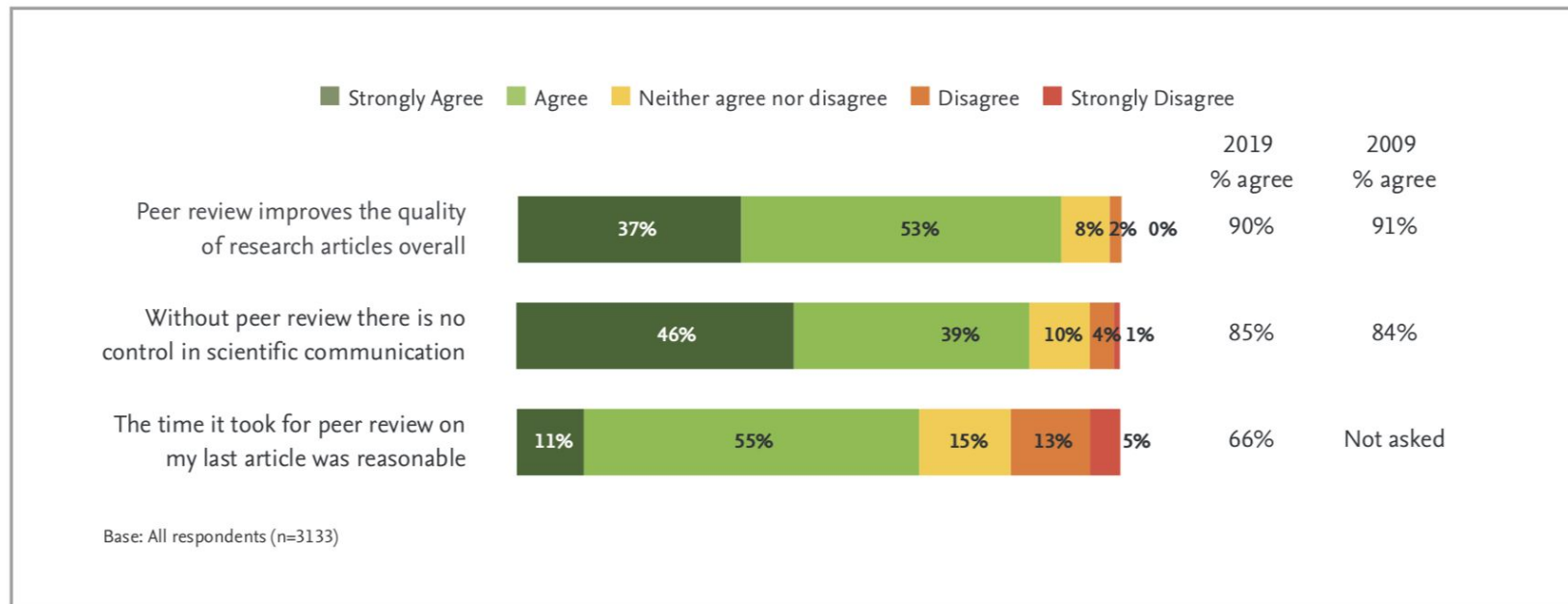


Figure 2: Researchers' views on how peer review is performing – 2009 and 2019 figures.

From: Quality, Trust and Peer Review: Researchers' Perspectives 10 Years On (2019)
www.senseaboutscience.org

Problems with Peer Review

- Slow
- Inefficient
- Poor at picking up misconduct
- Inconsistent
- Opaque

Changing the question

From “*Is this article worth publishing in this journal?*”

To “*Is this article of value to any particular reader?*”

Review happens all over the web!

Amazon Reviews

Join **amazon family**
Get an extra 20% off nappies

33 Reviews from our TripAdvisor Community

Write a Review Add

Neuroscience Self-awareness not unique to mankind
submitted 9 hours ago by **infelity**
1131 comments share

top 200 comments show 500
sorted by: best

[~] **mevaction** 795 points 8 hours ago*
It always seems like there is some conceptual barrier to "prove" self-awareness. But I once saw an experiment that made it seem so easy to believe. It was an ape...I believe a gorilla who knew how to use a mirror. In the experiment a handler put a sticker in the hair on the gorilla's face without the gorilla noticing. (Sort of like putting a "kick me" sign on someone) Later the gorilla is given access to a mirror and reacts in a way that was just like a person would. Immediate surprise and attention, pulling off the sticker and checking it out.
hmmm just looked it up...It's called the "mark test" or "rouge test" with human babies
[here with orangutan](#)
edit: had to add this I just found... [Asian elephants clearly passing the mark test](#) (Starts at 3:18...or watch that whole video...it's pretty good. Elephants checking themselves out in mirrors.)
permalink

[~] **nutmegthatube** 276 points 5 hours ago
I'm willing to bet there are also many self-aware animals that wouldn't pass this test because they don't perceive themselves as an image visually, but maybe as a certain scent or sound or something you couldn't test for with a mirror. After hearing about these experiments, I think it's a mystery why this research isn't given more attention by most people. I hadn't even heard of the mirror tests!
permalink parent

[~] **Phoenix_Lives** 44 points 4 hours ago
I agree. The mirror test is a useful tool for confirmation, but I get fairly annoyed when people use it as an

3,856 points (87% upvoted)
shortlink: <http://redd.it/3a14p4>

username
password
☐ remember me [reset password](#) [login](#)

SUBMIT A NEW LINK

science
[Unsubscribe](#) 8,458,179 readers (3,405 here)

NEW TO REDDIT? CLICK HERE!

GET FLAIR IN /r/science

PREVIOUS SCIENCE AMAs

REDDIT SCIENCE AMA SUBMISSION GUIDE

Filter by Field (Click to Filter)

Medicine Epidemiology
Physics Computer Sci

PREPRINTS

CREDIT



FEEDBACK



CITATIONS



Research
Square

Open access to 1,592,763 e-prints in the fields of physics, mathematics, computer science, quantitative biology, quantitative finance, statistics, electrical engineering and systems science, and economics. Submissions to arXiv should conform to Cornell University academic standards. arXiv is owned and operated by Cornell University, a private not-for-profit educational institution. arXiv is funded by Cornell University, the Simons Foundation and by the member institutions.

Subject search and browse:

30 Aug 2019: We're hiring a [Backend Python Developer](#)

20 Aug 2019: [arXiv Holiday scheduled for 2 September 2019](#)

12 Jun 2019: [We are hiring: Executive Director of arXiv.](#)

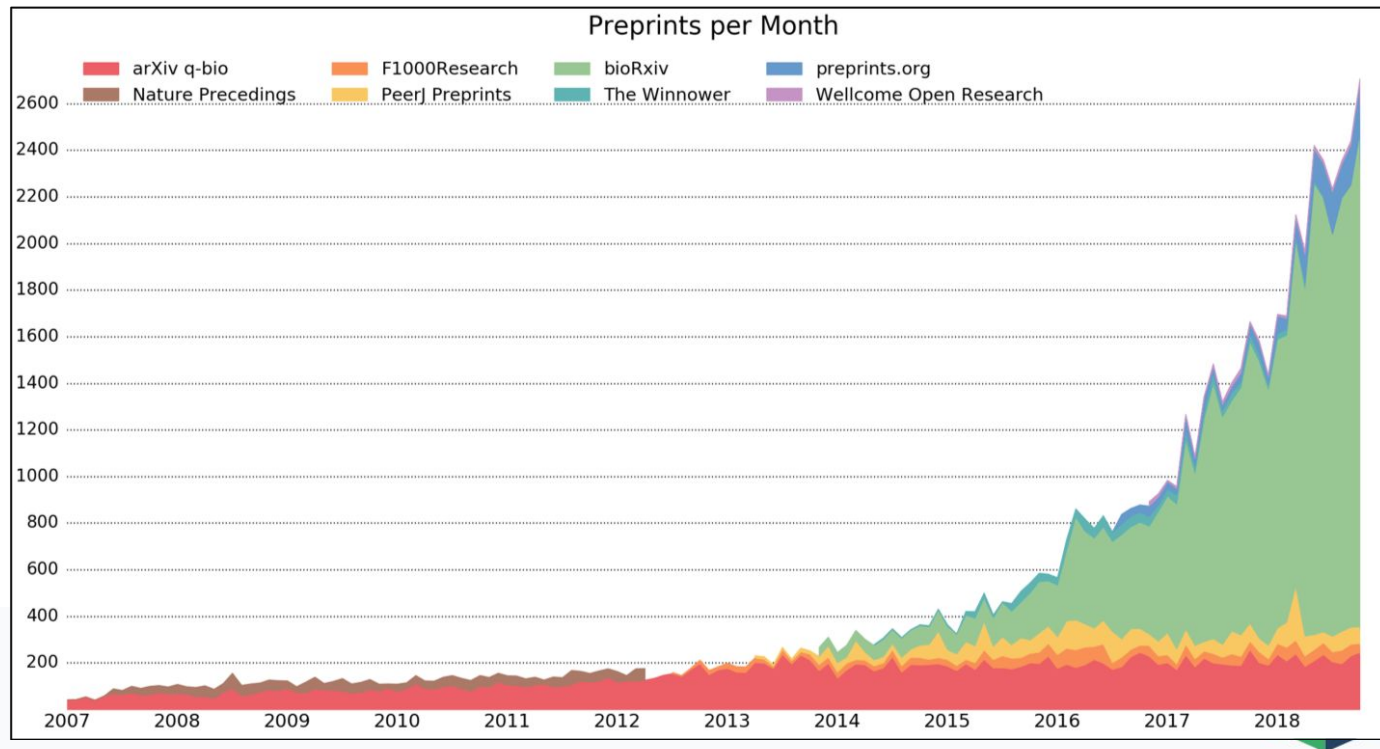
11 Jun 2019: [Announcing a new category and category mergers.](#)

See cumulative "What's New" pages. Read [robots beware](#) before attempting any automated download


Physics

- [Astrophysics \(astro-ph new, recent, search\)](#)
includes: [Astrophysics of Galaxies](#); [Cosmology and Nongalactic Astrophysics](#); [Earth and Planetary Astrophysics](#); [High Energy Astrophysical Phenomena](#); [Instrumentation and Methods for Astrophysics](#); [Solar and Stellar Astrophysics](#)
- [Condensed Matter \(cond-mat new, recent, search\)](#)
includes: [Disordered Systems and Neural Networks](#); [Materials Science](#); [Mesoscale and Nanoscale Physics](#); [Other Condensed Matter](#); [Quantum Gases](#); [Soft Condensed Matter](#); [Statistical Mechanics](#); [Strongly Correlated Electrons](#); [Superconductivity](#)
- [General Relativity and Quantum Cosmology \(gr-qc new, recent, search\)](#)
- [High Energy Physics - Experiment \(hep-ex new, recent, search\)](#)
- [High Energy Physics - Lattice \(hep-lat new, recent, search\)](#)
- [High Energy Physics - Phenomenology \(hep-ph new, recent, search\)](#)
- [High Energy Physics - Theory \(hep-th new, recent, search\)](#)
- [Mathematical Physics \(math-ph new, recent, search\)](#)
- [Nonlinear Sciences \(nlin new, recent, search\)](#)
includes: [Adaptation and Self-Organizing Systems](#); [Cellular Automata and Lattice Gases](#); [Chaotic Dynamics](#); [Exactly Solvable and Integrable Systems](#); [Pattern Formation and Solitons](#)
- [Nuclear Experiment \(nucl-ex new, recent, search\)](#)
- [Nuclear Theory \(nucl-th new, recent, search\)](#)
- [Physics \(physics new, recent, search\)](#)
includes: [Accelerator Physics](#); [Applied Physics](#); [Atmospheric and Oceanic Physics](#); [Atomic and Molecular Clusters](#); [Atomic Physics](#); [Biological Physics](#); [Chemical Physics](#); [Classical Physics](#); [Computational Physics](#); [Data Analysis, Statistics and Probability](#); [Fluid Dynamics](#); [General Physics](#); [Geophysics](#); [History and Philosophy of Physics](#); [Instrumentation and Detectors](#); [Medical Physics](#); [Optics](#); [Physics and Society](#); [Physics Education](#); [Plasma Physics](#); [Popular Physics](#); [Space Physics](#)

Preprints: a growing trend in biomedical sciences



Preprints and community review

**bioRxiv**
THE PREPRINT SERVER FOR BIOLOGY







HOME | ABOUT | SUBMIT | ALERTS / RSS
| CHANNELS

Search

Advanced Search

New Results

A simple proposal for the publication distributions

 Vincent Larivière,  Véronique Kiermer,  Marcia McNutt,  Mark Patterson,  Be Stuart Taylor,  Stephen Curry

doi: <https://doi.org/10.1101/062109>

This article is a preprint and has not been peer-reviewed

Abstract | Full Text | Info/History



ARTICLE USAGE

Article lifetime | Last 6 months

Article usage: July 2016 to July 2019


Show by month | Abstract




Total 62,109





See more details





228 readers on M
6 readers on Cite


31 Comments BioRxiv 

   Sort by Newest

 Join the discussion...



LOG IN WITH OR SIGN UP WITH DISQUS 


   

 Terry Burke · 3 years ago

Err... am I missing something? Why don't we just use a JIF based on the median, not the mean? Everyone knows that the no. of citations for every journal ranges from zero to a large number. Seeing the plot doesn't really help, and a summary statistic is (obviously) always going to be more comparable. But at least the median summarises something usefully meaningful, while the mean can bounce around wildly according to a few highly cited papers. The mean must also exaggerate the difference between the "high impact" and the rest, as just a few journals carry the few most distorting hyper-cited papers. It has always perplexed me why Garfield went for a JIF based on the mean.

It's inevitable that journals will have reputational differences and an impact factor (however calculated, but let's do it better) is inevitably going to feed into that. The error of judging a paper according to its location would remain, with or without a JIF.

  Reply · Share

 John Sack · 3 years ago

New Channels for Preprint Review



DropSynth 2.0: high-fidelity multiplexed gene synthesis in emulsions

 Angus M. Sidore,  Calin Plesa, Joyce A. Samson,  Sriram Kosuri

Preprint posted on August 20, 2019 <https://www.biorxiv.org/content/10.1101/740977v1>

Gene Synthesis Costs Reduced to a Drop in the Bucket –
DropSynth2.0 Improves Multiplexed Gene Synthesis

Selected by **Connor Rosen**



Categories: [synthetic biology](#), [systems biology](#)

Background:

In the last two decades, the ability to rapidly sequence DNA with ever-decreasing costs has revolutionized biology, generating vast amounts of genomic data and unlocking new areas of biology. A variety of highly multiplexed assays taking advantage of high-throughput DNA synthesis with next-generation DNA sequencing to interrogate function of DNA variants, generalized as Multiplexed Assays for Variant Effects (MAVEs), have revealed new biological insights at an incredible

Rela

Relate



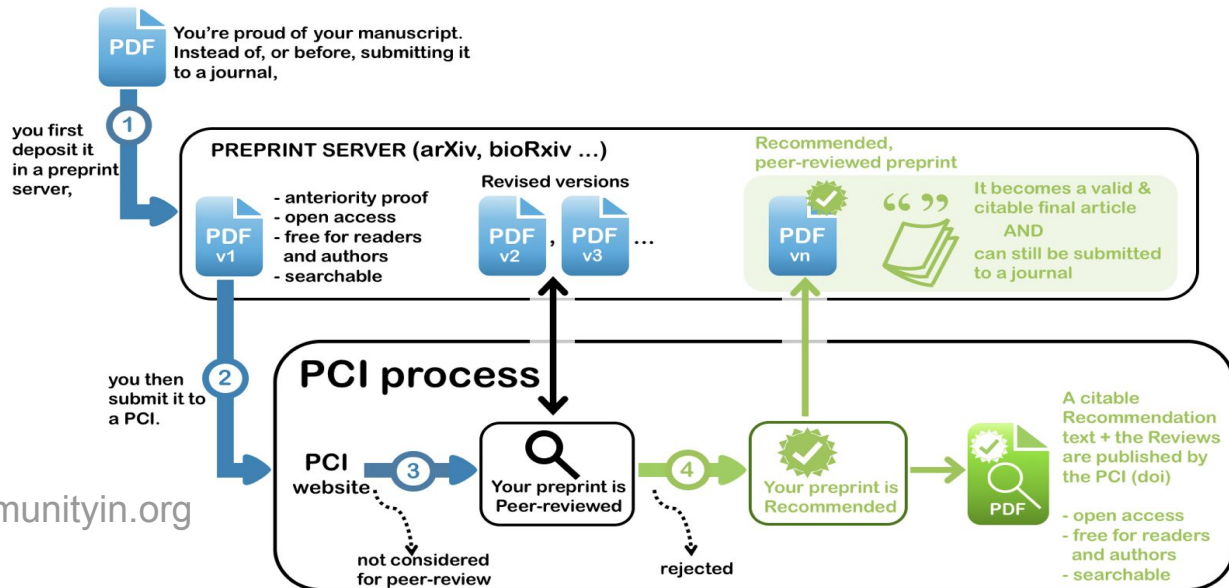
Peer Community In Circuit Neuroscience

SUBMIT A PREPRINT

LOG IN

or

REGISTER



www.peercommunityin.org

Research
square



PREreview · Laboratório de Neurociências e Comportamento

LaNeC Journal Club - PREreview of "Differential encoding of predator fear in the ventromedial hypothalamus and periaqueductal grey"

FEAR PREREVIEW RODENT



Caio Maximino (Laboratório de Neurociências e Comportamento)



Rhayra Xavier Do Carmo Silva (Laboratório de Neurociências e Comportamento)

Cite as: Caio Maximino, Rhayra Xavier do Carmo Silva. LaNeC Journal Club - PREreview of "Differential encoding of predator fear in the ventromedial hypothalamus and periaqueductal grey". *Authorea*. July 24, 2018. DOI:

<https://doi.org/10.22541/au.153242171.17634067> Download citation

Abstract

This is a journal club review of **Differential encoding of predator fear in the ventromedial hypothalamus and periaqueductal grey**, posted on bioRxiv (DOI: 10.1101/283820)



Preprint: Please note that this article has not completed peer review.



RESEARCH ARTICLE *Orthopedics*

A Comparison of Lumbosacral Kinematics during Prolonged Sitting in Non-specific Chronic Low Back Pain Subgroups; a cross-sectional study

> Mansoor Alameri, Everett Lohman III, Noha Daher, Robert Dudley, Amjad Shallan, Hatem Jaber

DOI: 10.21203/rs.2.13079/v1

Abstract

Abstract Background: Although, non-specific chronic low back pain (NSCLBP) has been associated with abnormal lumbosacral kinematics, little is known about the possible driving mechanisms of pain development overtime during prolonged sitting period. Therefore, the purpose of this study was to examine the differences in lumbosacral postures in adults with and without NSCLBP, and their role on pain development during a 1-hour of prolonged sitting task. **Methods:** Twenty NSCLBP subjects with motor control impairment (MCI) 10 classified as having flexion pattern (FP) disorder, and 10 with active extension pattern (AEP) disorder, and 10 healthy controls participated in the study. Subjects underwent a 1-hour sitting protocol on a standard office chair. Lumbosacral postures including: sacral tilt (ST), third lumbar vertebrae (L3) position, and relative lower lumbar angle (RLLA) were recorded using a two-dimensional inclinometer over the 1-hour period. Perceived back pain intensity was recorded using a numeric pain rating scale every 10 minutes throughout the sitting period. **Results:** All study groups presented with significantly distinctive lumbosacral kinematics at the lowest level of pain (the beginning of the sitting period) (p < 0.05), as well as at the highest level of pain (the end of the sitting period).

STATUS: IN REVIEW

BMC Musculoskeletal Disorders

INTEGRITY CHECK: ✓

PEER REVIEW TIMELINE

Version 1

Posted 16 Aug, 2019

Integrity comments so far

Review #1 received
Received 13 Sep, 2019

Reviewer #2 agreed
On 11 Sep, 2019

Editor assigned
On 20 Aug, 2019

4 reviewer(s) invited
Invitations sent on 20 Aug, 2019

Reviewer #1 agreed
On 20 Aug, 2019

Submission checks complete
On 13 Aug, 2019

Editor invited
On 13 Aug, 2019



This way, we were able to compare the lumbosacral postures of each subject when the pain was at its lowest and highest levels.

Statistical analysis

Data was summarized using mean and standard deviation (SD) for quantitative variables and counts (%) for qualitative variables. The normality of continuous variables was examined using Shapiro Wilk's test and Q-Q normality plots. The distribution of the subjects' characteristics by study group were evaluated using chi-square for gender, one-way Analysis of Variance (ANOVA) for age, height, mass and BMI, and independent t-test for duration of pain, NPRS (during past 24 hours, past week, and baseline), TSK and RMDI scores.

The primary analysis included a comparison of lumbopelvic kinematics (sacral tilt, L3 and RLLA) across groups at the lowest (baseline) and highest level of pain (minute 60) using one-way ANOVA (with post-hoc Bonferroni if results were significant). The secondary analysis included a comparison of lumbopelvic kinematics across groups over the entire 1-hour sitting using one-way ANOVA (with post-hoc Bonferroni). A third analysis included a 3x7 mixed factorial ANOVA (between factor: group; within factor: time) to examine changes in lumbopelvic kinematics and NPRS by study group over time. If the group x time interaction effect in the mixed factorial ANOVA was statistically significant, change from baseline was compared among groups at each time period (total of six "10-minute intervals") using one-way ANOVA (with post-hoc Bonferroni). If the interaction was not statistically significant, the between-groups comparison was considered not statistically significant. However, if the main effect of time was significant in the mixed factorial ANOVA, a one-way repeated measures ANOVA (with post-hoc Bonferroni) was used to examine changes over time within-groups separately. The level of significance was set at $p \leq 0.05$. Statistical analysis was performed using IBM SPSS Software version 24 for Windows (Chicago, IL, USA).

Annotations 1 Page Notes

[Show all annotations](#)**damianpattinson**

Just now

Public

Bonferroni

Could the authors comment on why they used Bonferroni post-hoc test instead of Tukey?



1

[Declarations](#)[References](#)[Tables](#)[Supplementary Files](#)

Comments (9)

Jake Johnson commented on 06 September 2019

As a medical student myself, I find these findings to correlate with my personal experience on this matter. Having instructors understand how to better communicate and connect with their classes is paramount to ensuring effectiveness of their lectures as well as their general rapport amongst their students. This is especially important as we continue to trail into the "digital age" of education. It would be interesting to see a follow-up study that compares student-assigned instructor ratings of instructors who utilized Facebook groups to connect with students to those who only used tradition methods of communication (I.e. email). Overall, I found this paper to be very well-written and poses instructors to reflect on their current means of classroom communication and to see how they can improve it. Thank you for the read.

[REPLY](#) [Report](#)

Shakeebuddin kashif commented on 06 September 2019

I don't know about how the culture of other countries is, but will definitely benefit in my place where people feel shy or not very important to ask the question in class, they feel free to ask it on Facebook without much hesitation. Also some people make anonymous academic

Preprint: Please note that this article has not completed peer review.



RESEARCH ARTICLE *Cancer Biology* *Oncology*

Transoral Robotic Surgery Versus Chemoradiation Treatment in Oropharyngeal Cancer: Case-matched Comparison of Survival and Swallowing Outcomes

> Connor Sommerfeld, Caroline Jeffery, Jessica M Clark, Daniel A O'Connell, Jeffrey Harris, Hadi Seikaly, Vincent Biron

DOI: 10.21203/rs.2.13186/v1

Abstract

Background

As the incidence of HPV/p16-positive oropharyngeal squamous cell carcinoma (OPSCC) continues to rise, a large population of survivors with treatment related morbidity is emerging. Transoral robotic surgery (TORS) is an excellent surgical option for p16-positive OPSCC but data comparing both survival and swallowing outcomes of this treatment versus radiotherapy/chemoradiotherapy (RT/CRT) remains limited.

Methods

Data was prospectively collected (05/2014 - 02/2019) in a tertiary care referral center from OPSCC patients treated with curative intent by TORS (+/-post-operative RT/CRT) or RT/CRT. Surgical and non-surgical treatment groups were case-matched for smoking status, T-stage, and N-stage based on AJCC 8th edition staging. Patients who were treated with curative intent by

STATUS: POSTED



PEER REVIEW TIMELINE

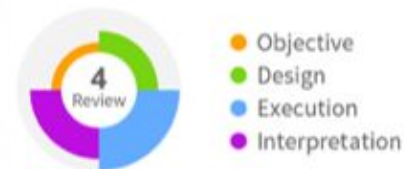
Version 1

Posted 20 Aug, 2019

[Submit an Open Review](#)

[How does it work?](#)

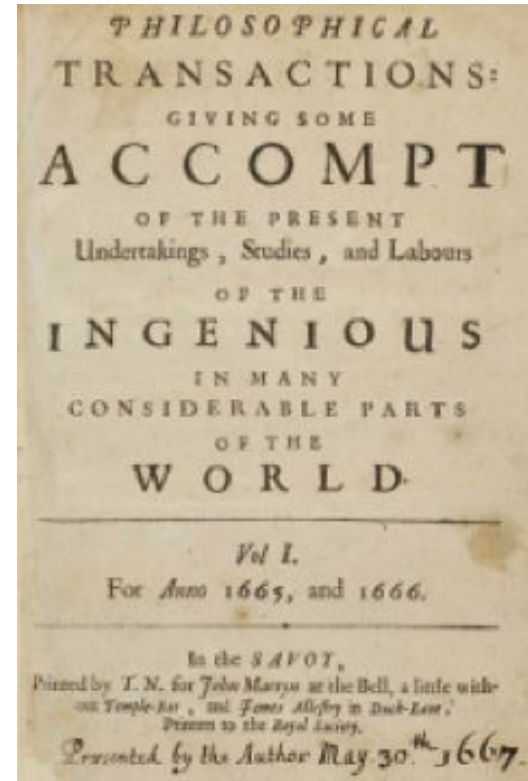
Structured Review Visualization



MORE FROM RESEARCH SQUARE

[Diagnostic value of HSP90α and Related Markers in Lung Cancer](#)

GOING BACK TO OUR ROOTS



BUT IN A DIGITAL WORLD

