# **Retraction Watch**

Tracking retractions as a window into the scientific process

# Author asks to retract nearly 20-year old paper over figure questions, lack of data

#### with 22 comments



The last author of a 1999 paper has asked the journal to retract it less than one month after a user <u>raised questions about images on PubPeer</u>.

Yesterday, last author Jim Woodgett posted a note on the site saying the author who generated the figures in question could not find the original data, and since he agreed the images appeared "suspicious," he had contacted the journal to retract the paper.

Here's the note from Woodgett, based at Lunenfeld-Tanenbaum Research Institute at Mount Sinai Hospital in Toronto:

...the person who generated the original data cannot source it and, as a consequence, a request to retract this paper based on the discrepancies in figure 5B and C has been submitted and approved.

The PubPeer exchange is over a pair of figures in the 1999 paper, "Regulation of the protein kinase activity of Shaggy(Zeste-white3) by components of the wingless pathway in Drosophila cells and embryos," which has been cited 77 times, according to Thomson Reuters Web of Science.

One day after a user posted the figures, Woodgett responded:

I'm senior author on that paper and those figures were all from my lab and most likely generated by the first author, Dr. Laurent Ruel, who is a fantastic geneticist. I'll ask him to dig out the primary auto rads (hopefully still has them from 17 years ago) but looks at my first glance like noise (the placement is just bizarre for any malicious intent, no?).

Woodgett added on the thread that the he agrees with the questions raised by the user:

I can't tell without the original data but the top figure is certainly suspicious to me, as it stands...

Yes, bottom suspicious too. The red box and area just below in lane F matches an unmarked space on the left-hand most lane that's not boxed. Too much of a coincidence...

On September 21, Woodgett announced on PubPeer that <u>he had asked the journal to retract the paper</u>, as the author who generated the figures could not find the original data to resolve the questions.

Woodgett told us isn't sure what went wrong with the images:

I think there was manipulation, and I don't understand why.

He added that he asked an outside expert to conduct an image analysis, who "backed up there were significant issues."

Woodgett said he wasn't surprised that Ruel — who left his lab in 1999 and now is based at <u>Institut Valrose</u> <u>Biologie</u> in France — couldn't find the original data. "I've got stuff from 1990," Woodgett told us, but he realizes many scientists don't keep their findings that long.

Mostly, Woodgett told us he is disappointed by the retraction, which he called a "waste:"

It was a great paper. That figure wasn't that important for the paper, certainly not for the conclusions.

He added that other groups have since backed up the paper's findings, which are now "lore."

It's not surprising that Woodgett acted so promptly and transparently when questions about one of his papers arose — a prime example of "doing the right thing." In 2012, he argued in *Nature* that scientists need to be more "open about our mistakes:"

The scientific community must be diligent in highlighting abuses, develop greater transparency and accessibility for its work, police research more effectively and exemplify laudable behaviour. This includes encouraging more open debate about misconduct and malpractice, exposing our dirty laundry and welcoming external examination.

We've asked *JBC* to confirm that the authors have requested to retract the paper, and contacted Ruel.

Woodgett was a co-author on one previous retraction, after a researcher forged his signature on a paper Woodgett didn't agree to publish. Here's <u>the notice</u> for "<u>GSK-3beta in mouse fibroblasts controls wound healing and fibrosis through an endothelin-1-dependent mechanism</u>," published in the *Journal of Clinical Investigation*:

The senior author, Andrew Leask, signed the authorship agreement form on behalf of James R. Woodgett without his knowledge or consent and takes full and complete responsibility for this action. The senior author sincerely apologizes for any inconvenience this error has caused and would like to emphasize that this in no way diminishes the validity of the data presented in the article. However, the article is being retracted in accordance with JCI policy.

Update 9/23/16 8:26 p.m. eastern: We've heard from Ruel, who responded to the suggestions the images had been manipulated:

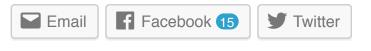
I have exchange on this with Dr. Jim Woodgett, and unfortunately I do not keep the original blots with me. Compared to other figures of the paper, the quality of the blots are very poor, grainy and low resolution (P32 labelling), and possible some cleaning work was done on the

background. But scientific information and contents of this figure are entirely accurate, as the rest of the paper, and [been] confirmed by numerous lab since [then].

As first author of this paper I am agreed with Dr. Woodgett for the retraction of 1999 JBC paper...

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Written by Alison McCook

September 23rd, 2016 at 9:30 am

Posted in <u>canada,data issues,doing the right thing,jbc retractions,molecular biology,not reproducible,society journal retractions,unreliable findings</u>

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fernandopessoa September 23, 2016 at 9:53 am

Jim Woodgett as penultimate author.

Oncogene. 2000 Aug 17;19(35):3971-7.

The conserved PI3'K/PTEN/Akt signaling pathway regulates both cell size and survival in Drosophila. Scanga SE1, Ruel L, Binari RC, Snow B, Stambolic V, Bouchard D, Peters M, Calvieri B, Mak TW, Woodgett JR, Manoukian AS.

Author information

1Department of Medical Biophysics, Division of Cell and Molecular Biology, Ontario Cancer Institute,

University Health Network, Princess Margaret Hospital, University of Toronto, 610 University Avenue, Toronto, Ontario, Canada, M5G 2M9.

https://pubpeer.com/publications/10962553

Figure 2. <a href="http://i.imgur.com/UbfoP90.jpg">http://i.imgur.com/UbfoP90.jpg</a>

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fernandopessoa September 23, 2016 at 9:58 am

Jim Woodgett as penultimate author.

Cell Signal. 2003 Jan;15(1):37-45.

Negative regulation of phosphatidylinositol 3-kinase and Akt signalling pathway by PKC.

Hui C Wen a, Wan C Huanga, Adnan Ali b, 1, James R Woodgettb, Wan W Lin, a, a Department of Pharmacology, College of Medicine, National Taiwan University, Taipei, Taiwan b Ontario Cancer Institute, Princess Margaret Hospital, 610 University Avenue, Toronto, ON, Canada M5G 2M9

https://pubpeer.com/publications/12401518

Figure 4.

http://i.imgur.com/WOyGsZA.jpg

Figure 1A.

http://i.imgur.com/BlxxuuL.jpg

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fernandopessoa September 23, 2016 at 10:02 am

Jim Woodgett as penultimate author.

Immunity. 2006 May;24(5):563-74.

IFN-gamma suppresses IL-10 production and synergizes with TLR2 by regulating GSK3 and CREB/AP-1 proteins.

Xiaoyu Hu1, 5, Paul K. Paik2, 5, Janice Chen3, Anna Yarilina1, Lisa Kockeritz4, Theresa T. Lu3, James R. Woodgett4, Lionel B. Ivashkiv1, 2, 3,

- 1 Arthritis and Tissue Degeneration Program, Hospital for Special Surgery, Weill Graduate School of Medical Sciences of Cornell University, New York, New York 10021
- 2 Weill Medical College of Cornell University, Weill Graduate School of Medical Sciences of Cornell University, New York, New York 10021
- 3 Graduate Program in Immunology and Microbial Pathogenesis, Weill Graduate School of Medical Sciences of Cornell University, New York, New York 10021
- 4 Ontario Cancer Institute/Princess Margaret Hospital, 610 University Avenue, Toronto, Ontario M5G 2M9, Canada

https://pubpeer.com/publications/16713974

Figure 1C. <a href="http://i.imgur.com/bH2AbZn.jpg">http://i.imgur.com/bH2AbZn.jpg</a>

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fernandopessoa September 23, 2016 at 10:06 am

Jim Woodgett as penultimate author.

J Biol Chem. 2007 Oct 19;282(42):30393-405. Epub 2007 Aug 21.

Glycogen synthase kinase-3beta induces neuronal cell death via direct phosphorylation of mixed lineage kinase 3.

Rajakishore Mishra ‡ § 1 , Manoj K. Barthwal ‡ § 1 , Gautam Sondarva ‡ § , Basabi Rana ‡ § , Lucas Wong ¶ , Malay Chatterjee || , James R. Woodgett\*\* and Ajay Rana ‡ § 2

Author Affiliations

‡Department of Internal Medicine, Cardiovascular and Cancer Research Institute, The Texas A & M University System-HSC, College of Medicine, and §Central Texas Veterans Health Care System, Temple, Texas 76504, the ¶Department of Internal Medicine, The Texas A & M University System-HSC, College of Medicine, Scott and White Clinic, Temple, Texas 76504, the \*\*Samuel Lunenfeld Research Institute, Mount Sinai Hospital, Toronto, Ontario M5G 1X5, Canada, and the ¶Division of Biochemistry, Department of Pharmaceutical Technology, Jadavpur University, Kolkata 700032, India

https://pubpeer.com/publications/17711861

Figure 6B. <a href="http://i.imgur.com/ulDrj9V.jpg">http://i.imgur.com/ulDrj9V.jpg</a>

Figure 3. <a href="http://i.imgur.com/mYUhwuC.jpg">http://i.imgur.com/mYUhwuC.jpg</a>

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fernandopessoa September 23, 2016 at 10:08 am

Jim Woodgett as penultimate author.

J Biol Chem. 2000 Sep 15;275(37):29147-52.

Glycogen synthase kinase 3beta negatively regulates both DNA-binding and transcriptional activities of heat shock factor 1.

Ilungo J. Xavier‡, Phillipe A. Mercier‡, Christine M. McLoughlin‡, Adnan Ali§, James R. Woodgett§ and Nick Ovsenek‡¶

Author Affiliations

From the ‡Department of Anatomy and Cell Biology, College of Medicine, University of

Saskatchewan, Saskatoon, Saskatchewan S7N 5E5, Canada and the §Division of Experimental Therapeutics, Ontario Cancer Institute/Princess Margaret Hospital, Toronto, Ontario M5G 2M9, Canada

https://pubpeer.com/publications/10856293

Figure 4. <a href="http://i.imgur.com/SqUgW5k.jpg">http://i.imgur.com/SqUgW5k.jpg</a>

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fernandopessoa September 23, 2016 at 10:14 am

Laurent Ruel as second author.

J Biol Chem. 2006 Sep 29;281(39):28584-95. Epub 2006 Jul 25.

Human receptors patched and smoothened partially transduce hedgehog signal when expressed in Drosophila cells.

De Rivoyre M1, Ruel L, Varjosalo M, Loubat A, Bidet M, Thérond P, Mus-Veteau I.

Author information

1Laboratoire de Physiologie Cellulaire et Moléculaire, CNRS Unité Mixte de Recherche (UMR) 6548, Université de Nice-Sophia Antipolis, Parc Valrose 06108 Nice Cedex 2, France.

https://pubpeer.com/publications/16867986 Figure 6C. http://i.imgur.com/DL6f9Uq.jpg

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fernandopessoa September 23, 2016 at 10:16 am

Lauren Ruel as second author.

Dev Cell. 2012 Feb 14;22(2):279-94. doi: 10.1016/j.devcel.2011.12.002. Epub 2012 Feb 2.

Distinct phosphorylations on kinesin costal-2 mediate differential hedgehog signaling strength.

Ranieri N1, Ruel L, Gallet A, Raisin S, Thérond PP.

Author information

1CNRS, UMR6543, Institut de Biologie du Développement et du Cancer-IBDC, Nice 06108, France.

https://pubpeer.com/publications/22306085

Figure 3G. <a href="http://i.imgur.com/qjWYz55.jpg">http://i.imgur.com/qjWYz55.jpg</a>

Figure 6D. <a href="http://i.imgur.com/9aXlQR1.jpg">http://i.imgur.com/9aXlQR1.jpg</a>

fernandopessoa September 23, 2016 at 10:19 am

Laurent Ruel as first author.

Nat Cell Biol. 2003 Oct;5(10):907-13. Epub 2003 Oct 1.

Stability and association of Smoothened, Costal2 and Fused with Cubitus interruptus are regulated by Hedgehog.

Ruel L1, Rodriguez R, Gallet A, Lavenant-Staccini L, Thérond PP.

Author information

1Institute of Signaling, Developmental Biology and Cancer Research, CNRS UMR 6543, Centre de Biochimie, Parc Valrose, 06108 Nice Cedex 02, France.

https://pubpeer.com/publications/14523402

Figure 2a. <a href="http://i.imgur.com/t4YjXir.jpg">http://i.imgur.com/t4YjXir.jpg</a>

Figure 3a. <a href="http://i.imgur.com/JlC4mXj.jpg">http://i.imgur.com/JlC4mXj.jpg</a>

Figure 3b. <a href="http://i.imgur.com/XsUNDa7.jpg">http://i.imgur.com/XsUNDa7.jpg</a>

Figure 4b. <a href="http://i.imgur.com/rle6jpI.jpg">http://i.imgur.com/rle6jpI.jpg</a>

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fernandopessoa September 23, 2016 at 10:54 am

Laurent Ruel as first author.

Development. 2007 Oct;134(20):3677-89. Epub 2007 Sep 19.

Phosphorylation of the atypical kinesin Costal2 by the kinase Fused induces the partial disassembly of the Smoothened-Fused-Costal2-Cubitus interruptus complex in Hedgehog signalling.

Ruel L1, Gallet A, Raisin S, Truchi A, Staccini-Lavenant L, Cervantes A, Thérond PP.

Author information

1Institute of Signaling, Developmental Biology and Cancer Research, CNRS UMR 6543, Université de Nice-Sophia Antipolis, Parc Valrose, 06108 Nice Cedex 02, France.

https://pubpeer.com/publications/17881487

Figure 3F. <a href="http://i.imgur.com/7IJsvjT.jpg">http://i.imgur.com/7IJsvjT.jpg</a>

Figure 4. http://i.imgur.com/smdqen8.jpg

fernandopessoa September 23, 2016 at 10:56 am

Laurent Ruel as second author.

Development. 2006 Feb;133(3):407-18. Epub 2006 Jan 5.

Cholesterol modification is necessary for controlled planar long-range activity of Hedgehog in Drosophila epithelia.

Gallet A1, Ruel L, Staccini-Lavenant L, Thérond PP.

Author information

1Institute of Signaling, Developmental Biology and Cancer Research, CNRS UMR 6543, Centre de Biochimie, Parc Valrose, Nice, France.

https://pubpeer.com/publications/16396912

Figure 4. <a href="http://i.imgur.com/UHvsNEs.jpg">http://i.imgur.com/UHvsNEs.jpg</a>

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Anonymous September 23, 2016 at 9:10 pm

Is this some sort of orchestrated campaign against Woodgett and Ruel?

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Anon September 24, 2016 at 2:04 am

Spot checking several of those boxed bands from the above comments, they don't even look similar. Are you just posting images and boxing the bands randomly?

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fernandopessoa September 26, 2016 at 4:31 am

Andrew Leask as first author.

Arthritis Rheum. 2002 Jul;46(7):1857-65.

Dysregulation of transforming growth factor beta signaling in scleroderma: overexpression of endoglin in cutaneous scleroderma fibroblasts.

Leask A1, Abraham DJ, Finlay DR, Holmes A, Pennington D, Shi-Wen X, Chen Y, Venstrom K, Dou



Anon September 24, 2016 at 2:04 am

Spot checking several of those boxed bands from the above comments, they don't even look similar. Are you just posting images and boxing the bands randomly?







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fernando pessoa September 24, 2016 at 4:10 am

Which bands do you think don't even look similar?









fernando pessoa September 24, 2016 at 4:19 am

The question you need to ask ask is: how likely are the images to be of different things?







X, Ponticos M, Black C, Bernabeu C, Jackman JK, Findell PR, Connolly MK.

Author information

1FibroGen, Inc., South San Francisco, California 94080, USA.

https://pubpeer.com/publications/12124870

Figure 1.

http://i.imgur.com/BTmHXwk.jpg

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fernandopessoa September 26, 2016 at 4:37 am

Andrew Leask as second author.

Fibrogenesis Tissue Repair. 2011 Mar 31;4(1):9. doi: 10.1186/1755-1536-4-9.

Thrombospondin 1 is a key mediator of transforming growth factor  $\beta$ -mediated cell contractility in systemic sclerosis via a mitogen-activated protein kinase kinase (MEK)/extracellular signal-regulated kinase (ERK)-dependent mechanism.

Chen Y1, Leask A, Abraham DJ, Kennedy L, Shi-Wen X, Denton CP, Black CM, Verjee LS, Eastwood M.

Author information

1School of Life Sciences, University of Westminster, London, UK.

https://pubpeer.com/publications/21453480

Figure 2(A). <a href="http://i.imgur.com/b5j9X1p.jpg">http://i.imgur.com/b5j9X1p.jpg</a>

Figure 6A. <a href="http://i.imgur.com/CIIvU3S.jpg">http://i.imgur.com/CIIvU3S.jpg</a>

Figure 1A Am J Pathol 167,1699 and figure 6A Fibrogenesis Tissue Repair 2011 Mar 31;4(1):9. <a href="http://i.imgur.com/DMJorda.jpg">http://i.imgur.com/DMJorda.jpg</a>

Figure 3A Am J Pathol 167,1699 and figure 6A Fibrogenesis Tissue Repair 2011 Mar 31;4(1):9. <a href="http://i.imgur.com/yfpunMO.jpg">http://i.imgur.com/yfpunMO.jpg</a>

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fernandopessoa September 26, 2016 at 4:59 am

Andrew Leask as first author.

J Biol Chem. 2003 Apr 11;278(15):13008-15. Epub 2003 Feb 5.

Connective tissue growth factor gene regulation. Requirements for its induction by transforming growth factor-beta 2 in fibroblasts.

Leask A1, Holmes A, Black CM, Abraham DJ.

Author information

1Fibrogen, Inc., South San Francisco, California 94080, USA.

https://pubpeer.com/publications/12571253

Figure 1A. <a href="http://i.imgur.com/9sY1jtW.jpg">http://i.imgur.com/9sY1jtW.jpg</a>

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fernandopessoa September 26, 2016 at 5:02 am

Andrew Leask as senior author.

Am J Pathol. 2005 Dec;167(6):1699-711.

Matrix contraction by dermal fibroblasts requires transforming growth factor-beta/activin-linked kinase 5, heparan sulfate-containing proteoglycans, and MEK/ERK: insights into pathological scarring in chronic fibrotic disease.

Chen Y1, Shi-Wen X, van Beek J, Kennedy L, McLeod M, Renzoni EA, Bou-Gharios G, Wilcox-Adelman S, Goetinck PF, Eastwood M, Black CM, Abraham DJ, Leask A.

Author information

1Centre for Rheumatology, University College London, Royal Free Campus, UK

https://pubpeer.com/publications/16314481

Figure 11. <a href="http://i.imgur.com/CxxGgQV.jpg">http://i.imgur.com/CxxGgQV.jpg</a>

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fernandopessoa September 26, 2016 at 5:04 am

Andrew Leask as senior author.

Mol Biol Cell. 2004 Dec;15(12):5635-46. Epub 2004 Sep 15.

CCN2 (connective tissue growth factor) promotes fibroblast adhesion to fibronectin.

Chen Y1, Abraham DJ, Shi-Wen X, Pearson JD, Black CM, Lyons KM, Leask A.

Author information

1Centre for Rheumatology, Royal Free and University College Medical School, University College London (Royal Free Campus), Hampstead, London NW3 2PF, United Kingdom.

https://pubpeer.com/publications/15371538

Figure 6C. <a href="http://i.imgur.com/0BBfonW.jpg">http://i.imgur.com/0BBfonW.jpg</a>

fernandopessoa September 26, 2016 at 5:06 am

Andrew Leask as senior author.

FASEB J. 2002 Dec;16(14):1949-51. Epub 2002 Oct 4.

Prostacyclin derivatives prevent the fibrotic response to TGF-beta by inhibiting the Ras/MEK/ERK pathway.

Stratton R1, Rajkumar V, Ponticos M, Nichols B, Shiwen X, Black CM, Abraham DJ, Leask A. Author information

1Centre for Rheumatology, Royal Free Hospital and University College School of Medicine, London NW3 2PF, UK.

https://pubpeer.com/publications/12368229

Figure 4A. <a href="http://i.imgur.com/ilzQEGS.jpg">http://i.imgur.com/ilzQEGS.jpg</a>

Figure 2E FASEB J 16,1949 and figure 1 J Biol Chem 275:15220. <a href="http://i.imgur.com/oonofTi.jpg">http://i.imgur.com/oonofTi.jpg</a>

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fernandopessoa September 26, 2016 at 5:09 am

Andrew Leask retraction 2009. <a href="https://pubpeer.com/publications/18292803">https://pubpeer.com/publications/18292803</a>

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fernandopessoa September 26, 2016 at 8:44 am

Andrew Leask as senior author.

Kidney Int. 2002 Oct;62(4):1149-59.

CTGF expression in mesangial cells: involvement of SMADs, MAP kinase, and PKC.

Chen Y1, Blom IE, Sa S, Goldschmeding R, Abraham DJ, Leask A.

Author information

1FibroGen, Inc., 225 Gateway Boulevard, South San Francisco, CA 94080, USA.

https://pubpeer.com/publications/12234285

Figure 10. <a href="http://i.imgur.com/i83vwG3.jpg">http://i.imgur.com/i83vwG3.jpg</a>

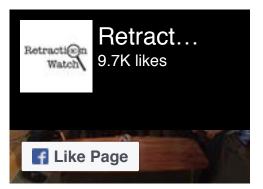
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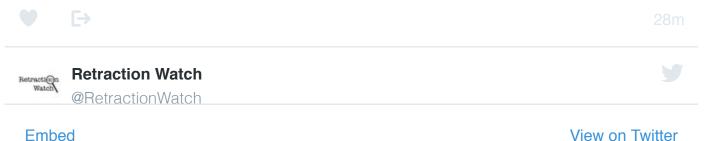
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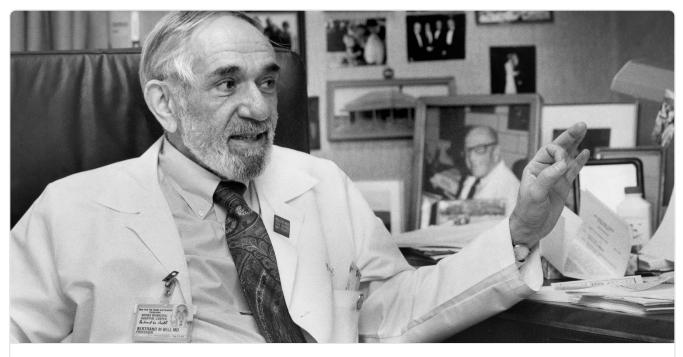
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