

RESEARCH MISCONDUCT

A FOCUS ON PUBLICATION

MARJORIE BARDIAU
CHRISTOPHE DONY

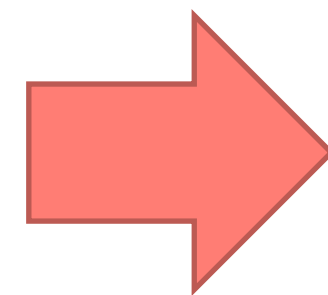


A building block

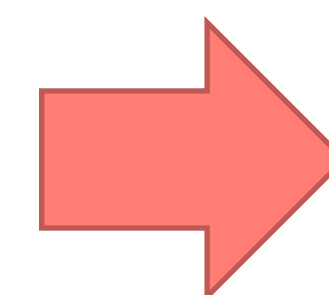


Search

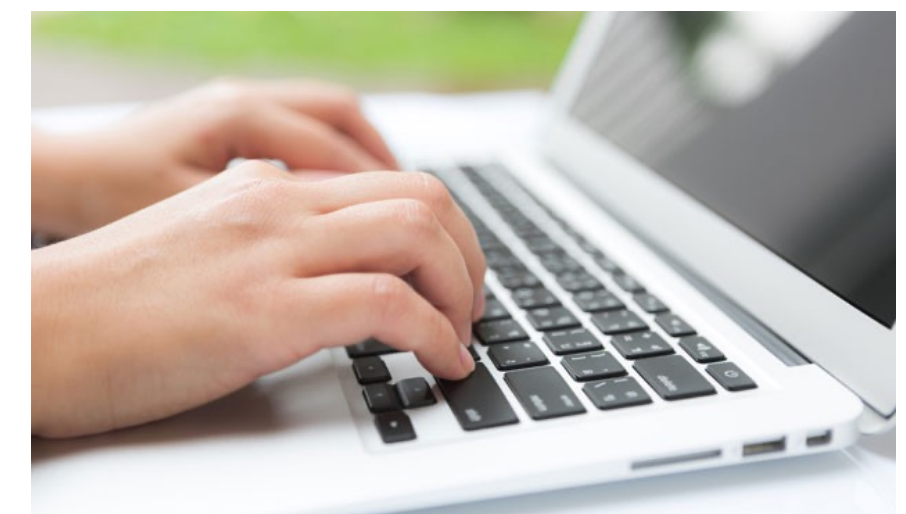
(almost always based on previous published works)



Find

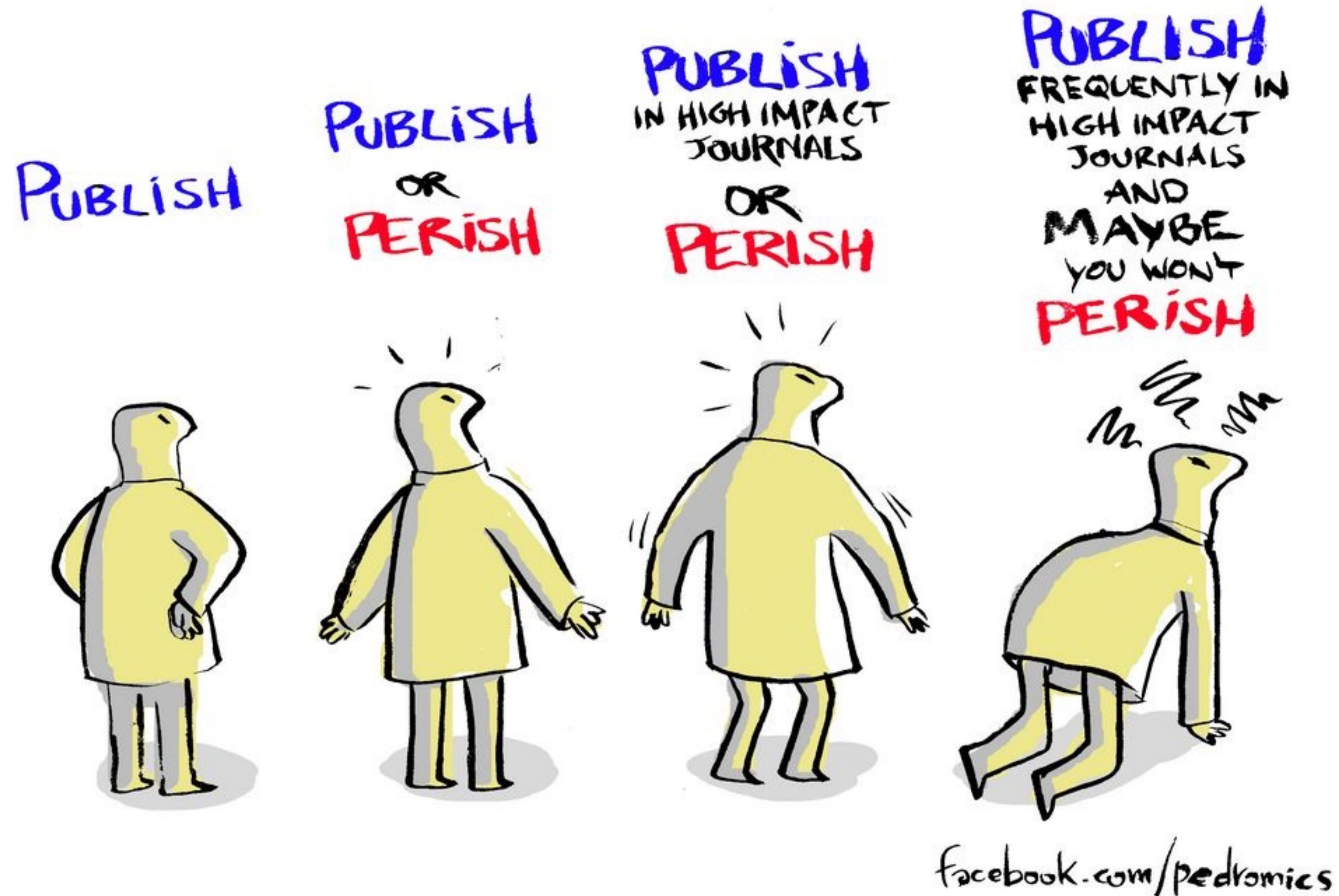


Based on trust



Publish

WHAT DRIVE TO RESEARCH MISCONDUCT?



WHAT DRIVE TO RESEARCH MISCONDUCT?

All the academia system is based on publications.

Want to get
your PhD?

Want to get
funded?





PUBLISH

Want to get
promoted?

Want to get
extra money?



WHAT DRIVE TO RESEARCH MISCONDUCT?

PERSONAL LEVEL	<p>Bob is falsifying data</p> <p>Bob is working hard to publish his research. He is facing a tight deadline and his experiments are not yielding desirable results. He feels that the only way to meet his deadline is to falsify his data.</p> <p>What leads him to commit research misconduct?</p> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">13</div> <p>HHS makes about 13 findings of research misconduct a year.</p> 
INTERPERSONAL LEVEL	<p>Bob's lab is under pressure to publish</p> <p>Dr. C, Bob's boss, places unreasonable demands on the lab team to produce publishable results. Dr. C is busy and rarely reviews the raw data. Without any oversight, Bob easily falsifies his data.</p> <p>What can his lab supervisor do to reduce this pressure?</p> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">72%</div> <p>In 45 cases of research misconduct committed by trainees, 72% of supervisors had not reviewed the source data.²</p> 
INSTITUTIONAL LEVEL	<p>The university rewards academic publications and grants</p> <p>Dr. C needs more publications to earn tenure. Her department chair requires Dr. C to secure grant funding to maintain her lab. These pressures distract Dr. C from her mentoring responsibilities in the lab.</p> <p>What can the university do to reward responsible research?</p> 
RESEARCH COMMUNITY LEVEL	<p>The research community reinforces the pressure to "publish or perish"</p> <p>Bob, Dr. C, and their institution are part of a broader research community. They all face the competitive pressures generated by their peers, funding sources, journals, and academic societies.</p> <p>What can the research community do to change this norm?</p> <div style="border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; margin: 10px auto;">8%</div> <p>Nature only publishes about 8% of papers submitted.³</p> 

“Getting my name on this article would look really good on my CV.”

“It’s only a few data points, and those runs were flawed anyway.”

“The better the story we can tell, the better a journal we can go for.”

“The PI’s instructions don’t exactly match the protocol approved by the ethics review board, but she is the senior researcher.”

“I’ve worked so hard on this, and I know this works, and I need to get this publication.”

RESEARCH MISCONDUCT IS

By the USA Office of Research Integrity (ORI)

1) Plagiarism

- Copy without citation
- Use the work of someone without citation (even if the person agrees)
- Copy your own work without citation
- ...

2) Falsification

- Altered photographic figures
- Omitting (important) outliers data (on purpose)
- Changing your data
- ...

3) Fabrication

- Inventing results
- Inventing a whole article (Paper mills)
- ...

RESEARCH MISCONDUCT IS

By the USA Office of Research Integrity (ORI)

1) Plagiarism

LE PLAGIAT ? PAS POUR MOI !
Guide à l'intention des étudiants de l'Université de Liège
student.uliege.be/plagiat

- Copy someone's work
- Use someone's work even if you cite it
- Copy someone's work without giving credit
- ...

LIÈGE université

2) Falsification

- Altered photographic figures
- Omitting (important) outliers data (on purpose)
- Changing your data
- ...

3) Fabrication

- Inventing results
- Inventing a whole article (Paper mills)
- ...

Predatory journal

RESEARCH MISCONDUCT COULD ALSO STAND IN A GREY ZONE

1) Plagiarism

2) Falsification

3) Fabrication

4) Biaias

- P-hacking
- Null results
- Novelty > solid results

5) Negligence

- Replicability
- Inadequate record of research projects
- Inadequate research design

6) Hype

- Ties with editor/reviewers
- Ghost authorship or eviction
- Salami-slicing

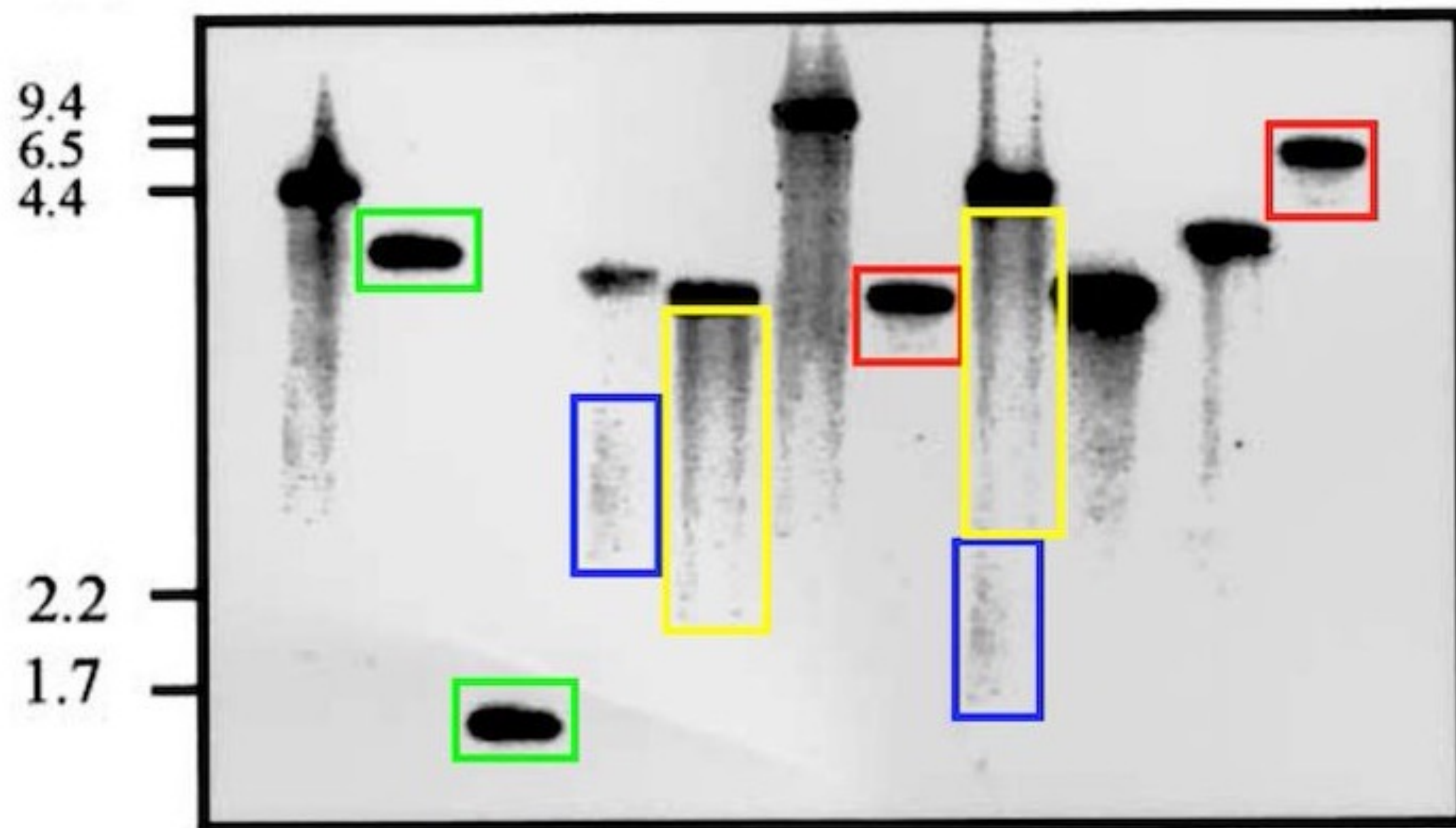
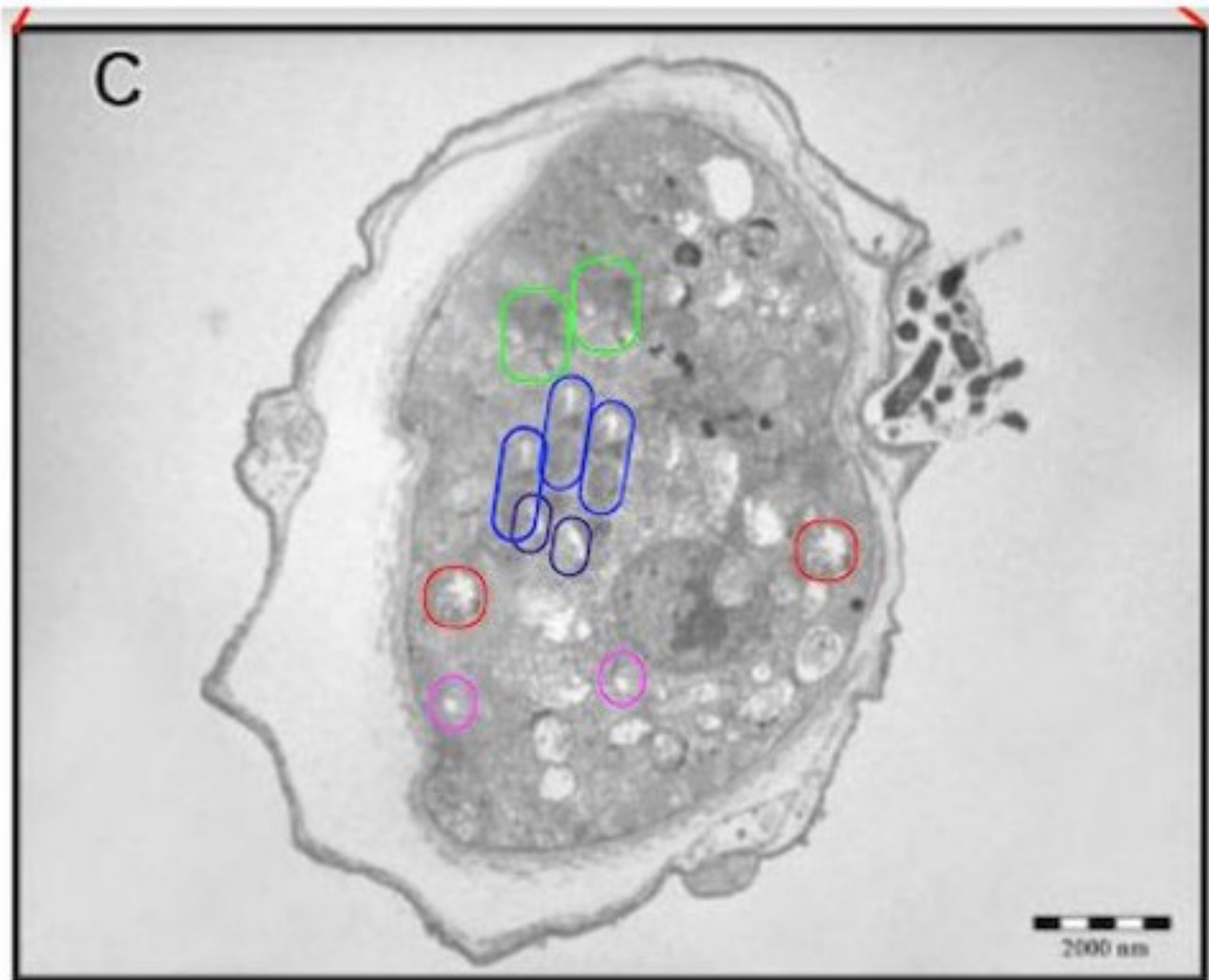


IMAGE FALSIFICATION

IMAGE FALSIFICATION

Duplicated or altered photographic figures

Aka "photoshoping"

Different degrees of falsification

IMAGE FALSIFICATION

Level 1: simple duplication

Honest mistake
OR
Image manipulation ?

Expression of fluorescent recombinant protein of different bacterial strains

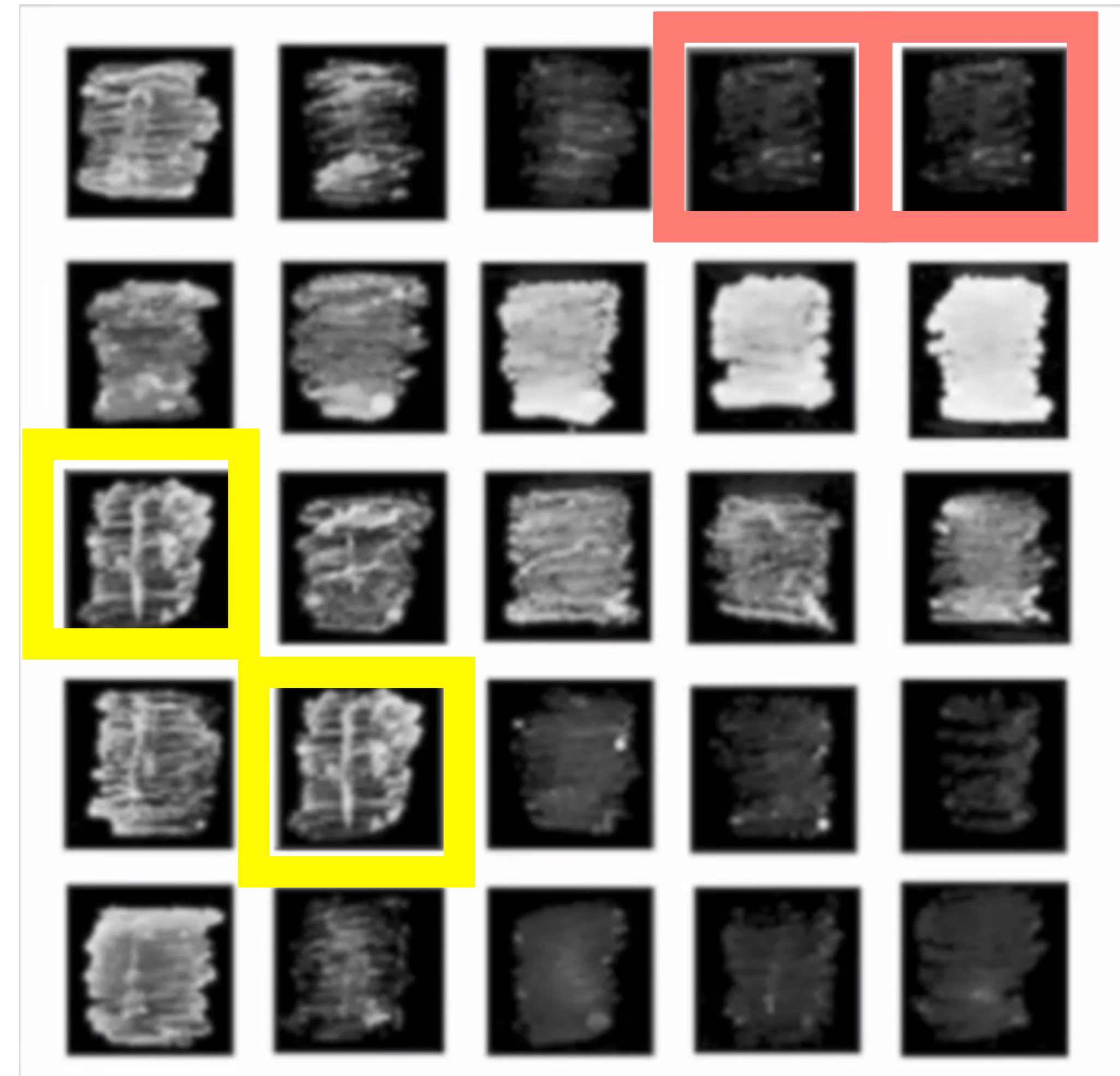


IMAGE FALSIFICATION

Level 2: duplication with repositioning and/or alteration

Honest mistake

OR

Image manipulation ?

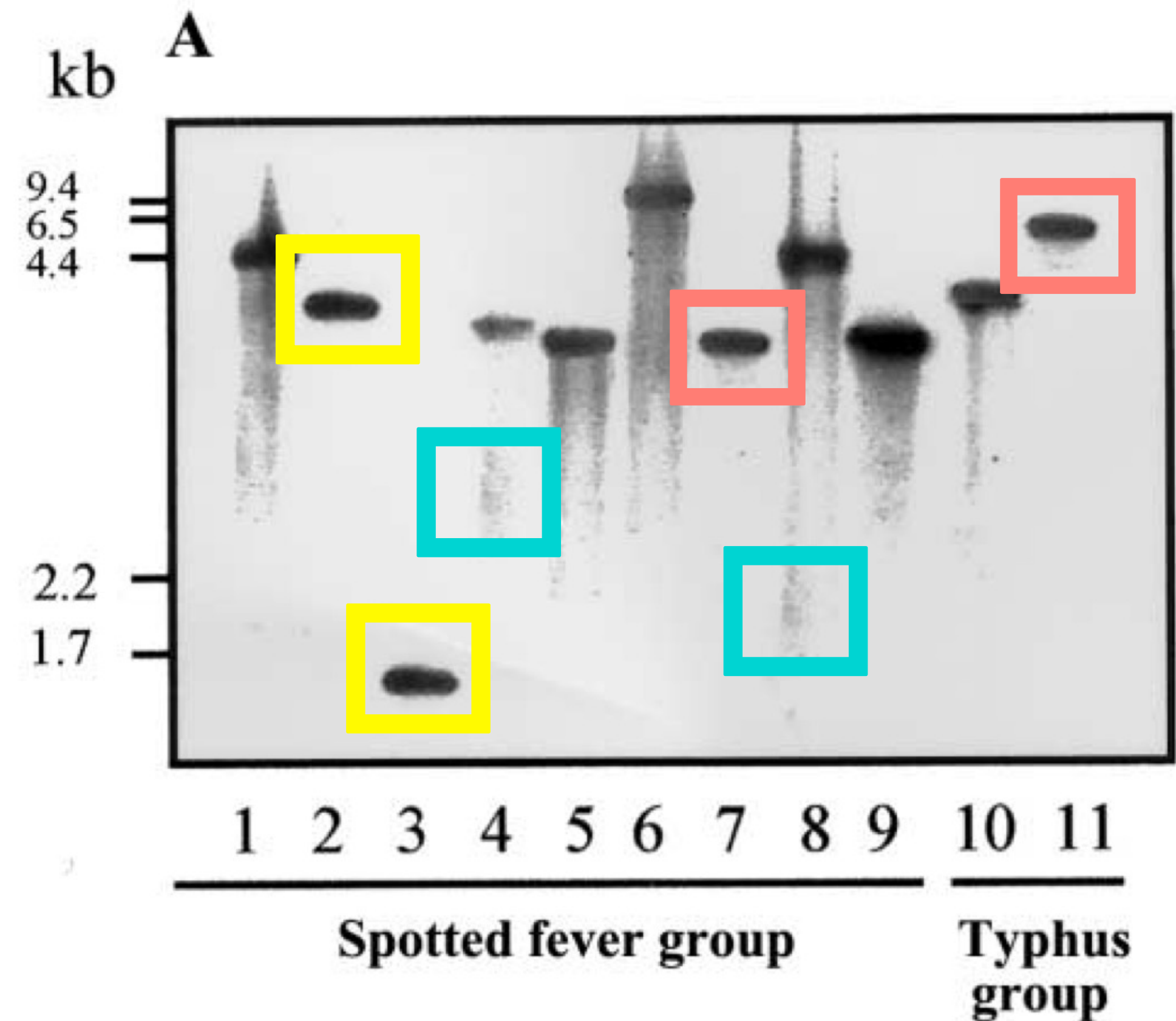


IMAGE FALSIFICATION

Level 2: duplication with repositioning and/o

Honest mistake
OR
Image manipulation ?

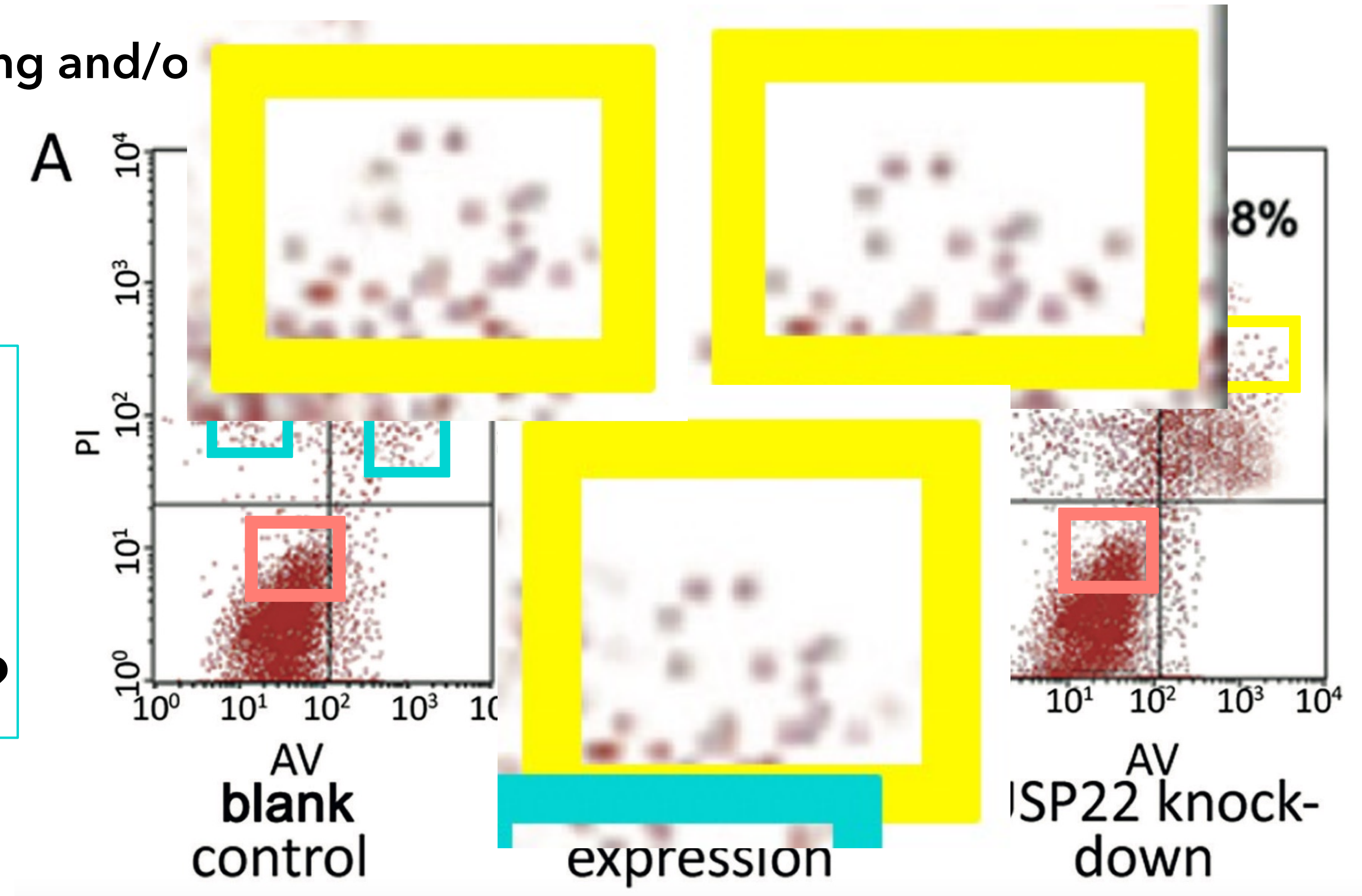


IMAGE FALSIFICATION

Level 2: duplication with repositioning and/or alteration



IMAGE FALSIFICATION

Level 2: duplication with repositioning and/or alteration



IMAGE FALSIFICATION

r alteration



[Front Microbiol.](#) 2010; 1: 151.

Published online 2011 Jan 17. doi: [10.3389/fmicb.2010.00151](https://doi.org/10.3389/fmicb.2010.00151)

Defining Pathogenic Bacterial Species in the Genomic Era

[Kalliopi Georgiades](#)¹ and [Didier Raoult](#)^{1,*}

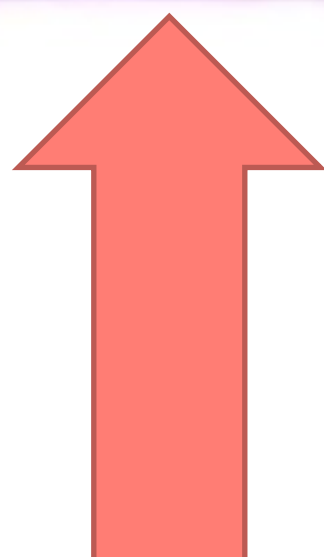
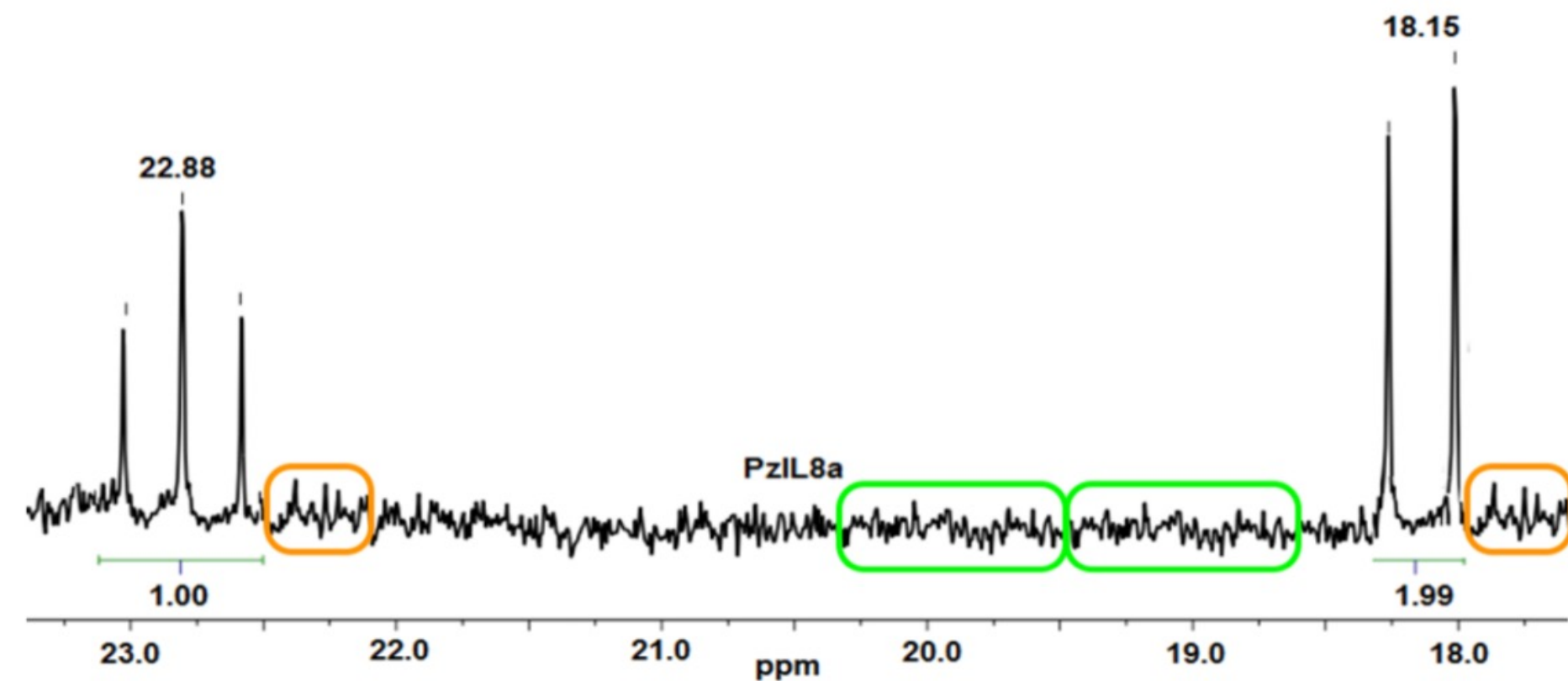
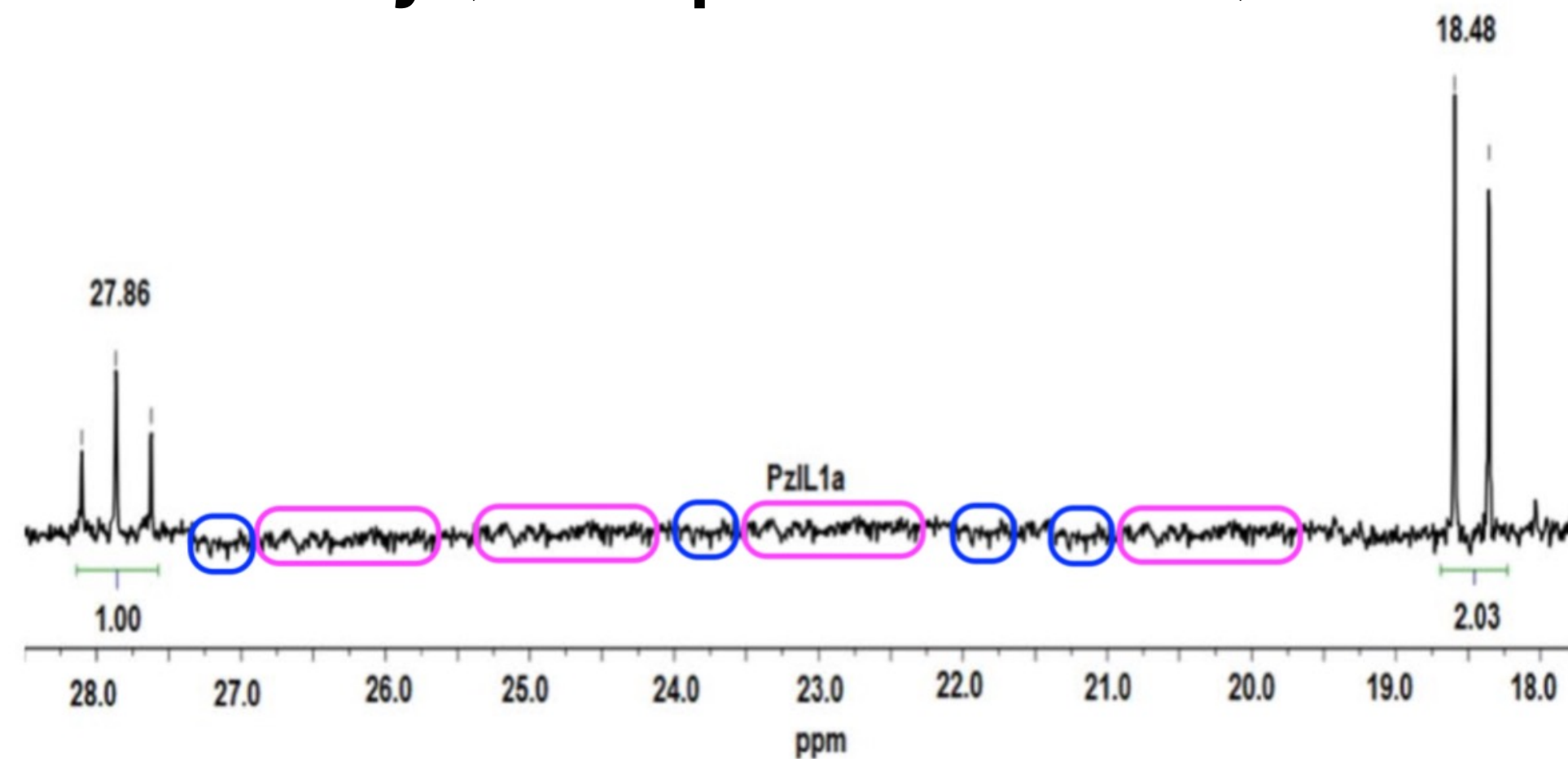


IMAGE FALSIFICATION

Chemistry (nanoparticules lab)



Archeology

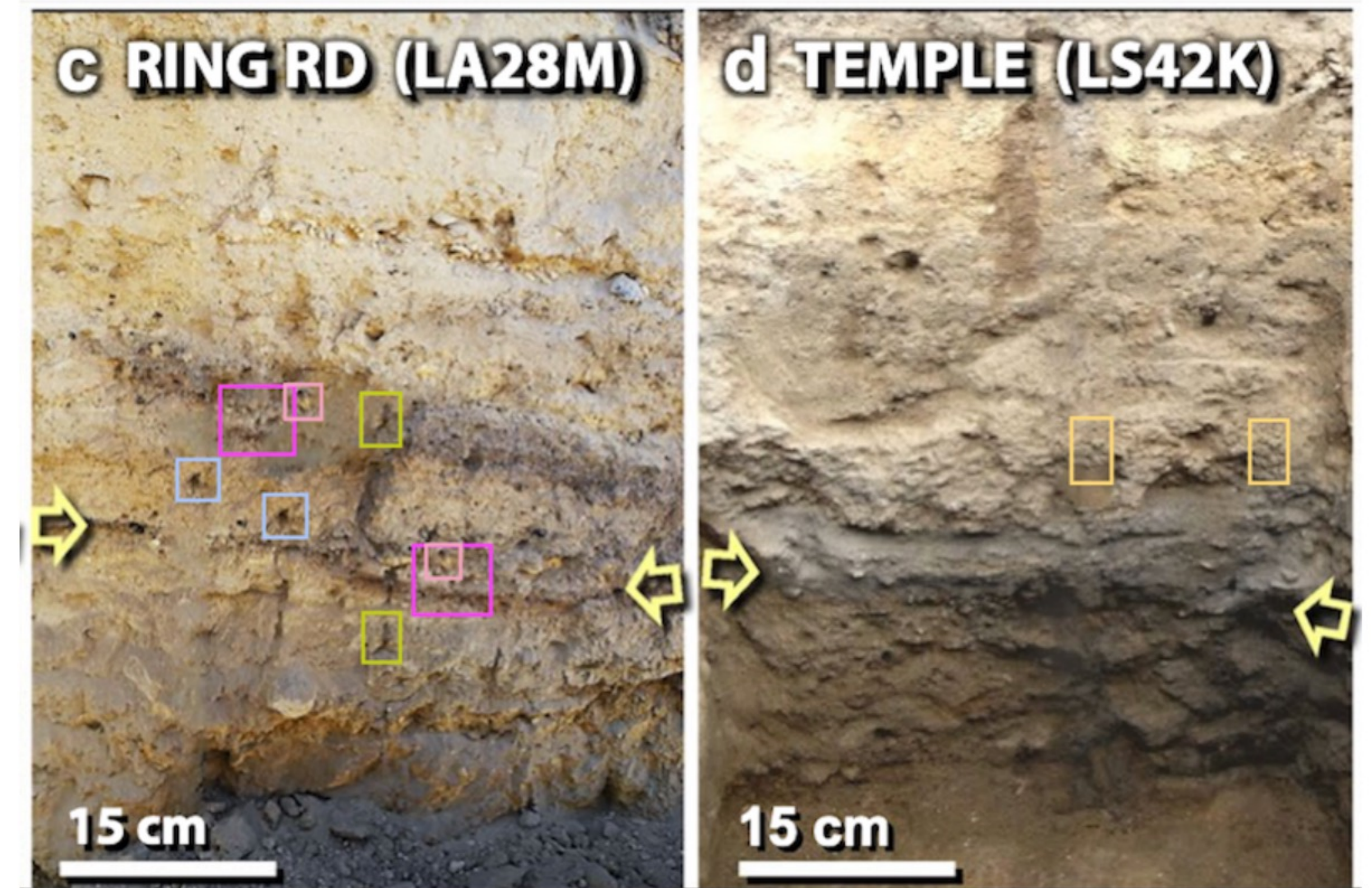


IMAGE FALSIFICATION

AMERICAN SOCIETY FOR MICROBIOLOGY | mBio®

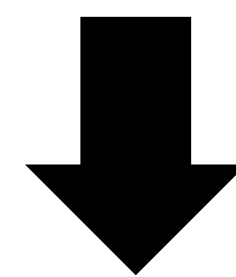
PERSPECTIVE
CrossMark
← click for updates

The Prevalence of Inappropriate Image Duplication in Biomedical Research Publications

Elisabeth M. Bik,^a Arturo Casadevall,^{b,c} Ferric C. Fang^d

Department of Medicine, Division of Infectious Diseases, Stanford School of Medicine, Stanford, California, USA^a; Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA^b; Department of Medicine, Johns Hopkins School of Medicine, Baltimore, Maryland, USA^c; Departments of Laboratory Medicine and Microbiology, University of Washington School of Medicine, Seattle, Washington, USA^d

20 621 articles (1995-2014)
scanned for image manipulation



+/- 800 articles with duplicated images (4%)

Probably +/-400 articles INTENTIONAL

AMERICAN SOCIETY FOR MICROBIOLOGY | Molecular and Cellular Biology®

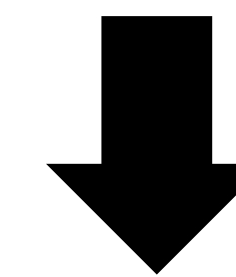
RESEARCH ARTICLE

Check for updates

Analysis and Correction of Inappropriate Image Duplication: the *Molecular and Cellular Biology* Experience

Elisabeth M. Bik,^a Ferric C. Fang,^{b,f} Amy L. Kullas,^c Roger J. Davis,^d Arturo Casadevall^e

960 articles (2009-2016) scanned
for image manipulation

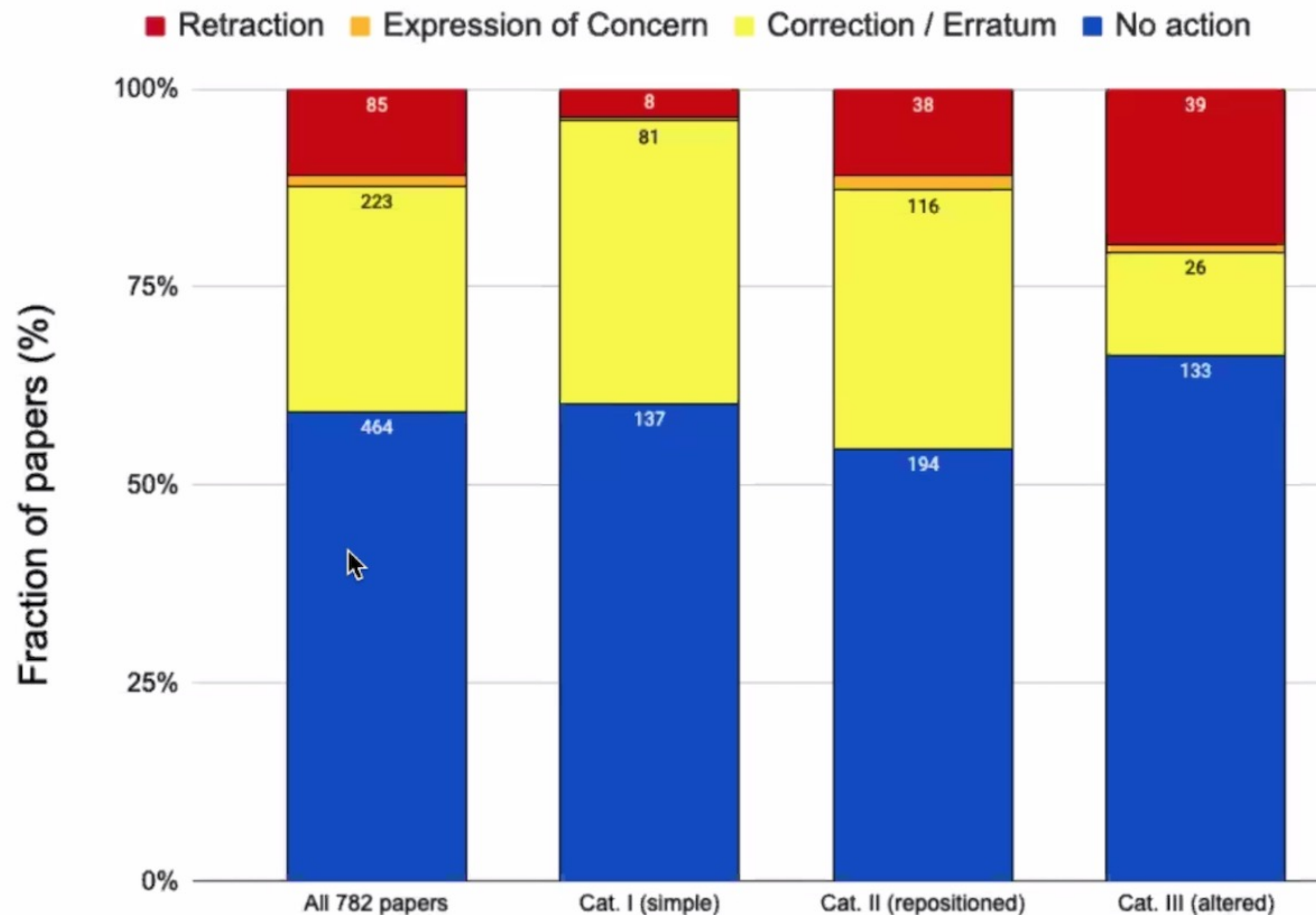


59 articles with duplicated images (6%)

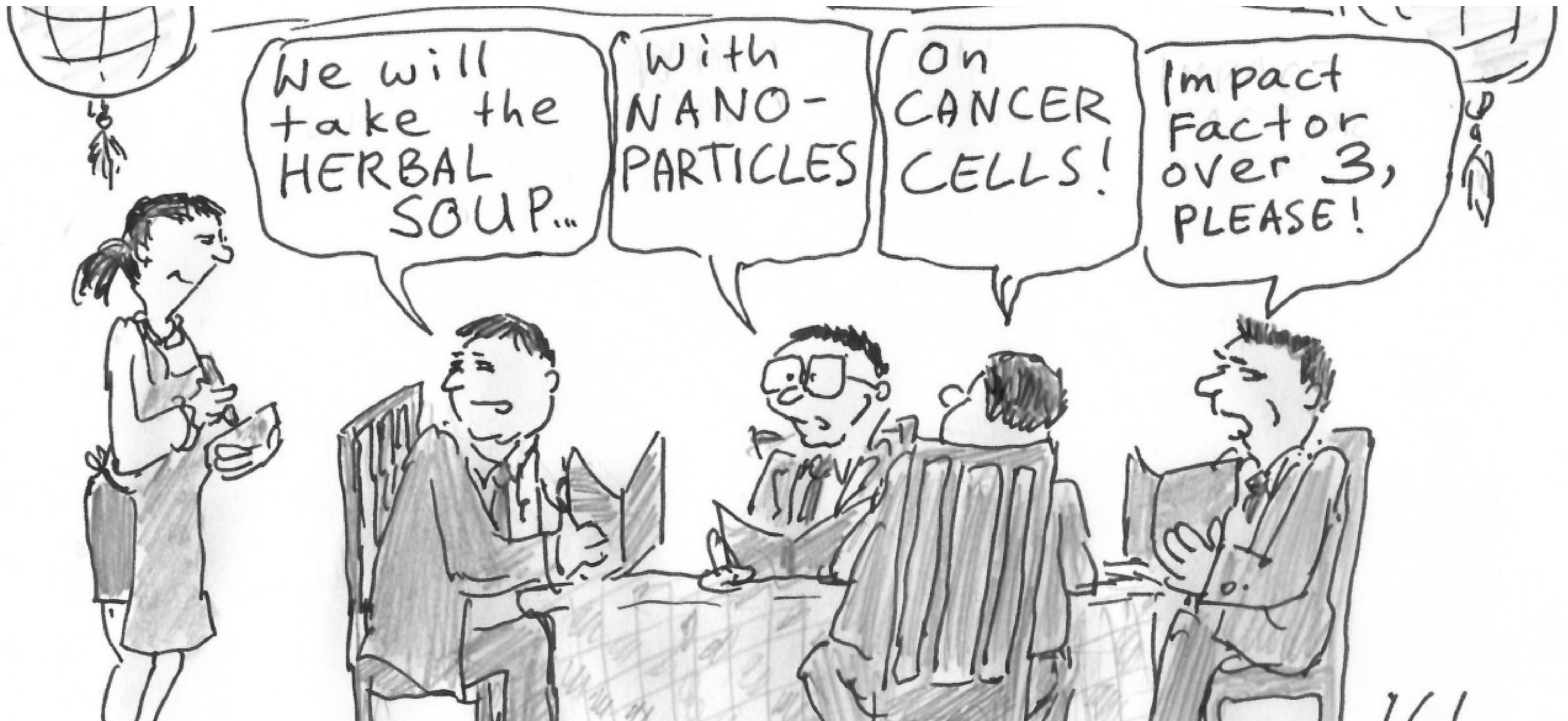
IMAGE FALSIFICATION

Articles with image duplication can be reported to the journal editors

BUT



- Slow reaction
- Moderate reaction

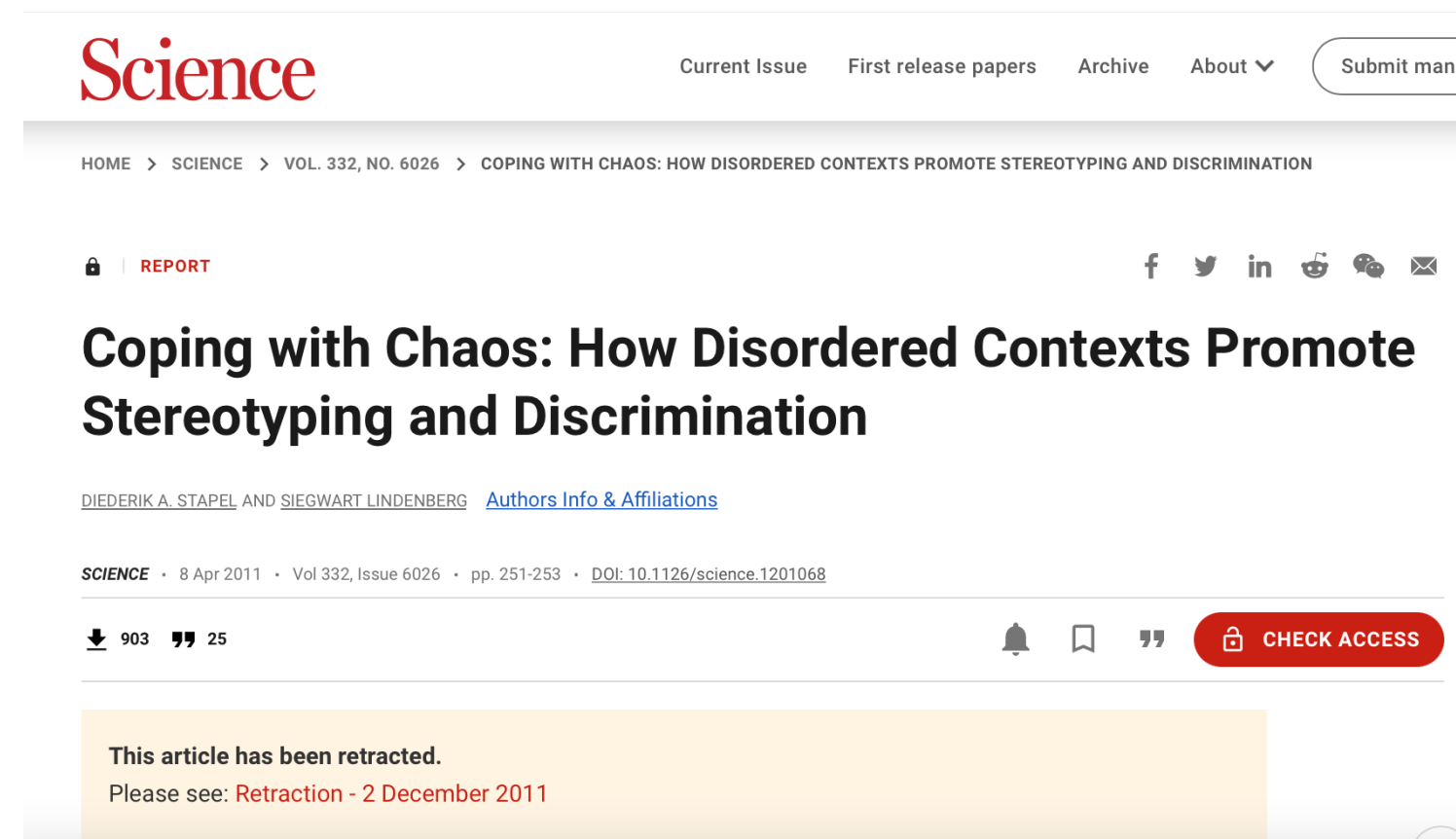


PAPER MILLS

RESULTS INVENTION

Individual level

Exemple: Diederik Stapel (Social psychology)
Tielburg university, The Netherlands



Invented results used in at least 30 published,
peer-reviewed papers (2004-2011)

"Industrial" level

Paper Mills

= totally fabricated articles from
A to Z based on a template

\$8-10K

(up to 30K for high IF journals)

PAPER MILLS

Insert the name
of a
molecule

Pick a verb
(present tense,
third person
singular form)

Choose one
or two cellular
processes

Pick a
cancer or
cell type

Pick your
connector
word

Choose a verb
(present
particle form)

Insert name
of miRNA or
pathway

<protein name>
<drug name>
<RNA name>

alleviates
attenuates
exerts
governs
inhibits
prevents
promotes
protects
relieves
remits
retards
suppresses

apoptosis
autophagy
inflammation
invasion
migration
proliferation
viability

lung cancer
medulloblastoma
renal carcinoma
ovarian cancer

by
via
through

activating
attenuating
declining
downregulating
inhibiting
interfering with
modulating
targeting
regulating
upregulating

<miRNA name>
<pathway name>
<protein name>

> [Onco Targets Ther.](#) 2018 Apr 18;11:2205–2216. doi: 10.2147/OTT.S156361. eCollection 2018.

miR-488 inhibits cell growth and metastasis in renal cell carcinoma by targeting HMGN5

Xin Wei ¹, Lili Yu ¹, Xiangbo Kong ¹

Affiliations + expand

PMID: 29713189 PMCID: [PMC5912367](#) DOI: [10.2147/OTT.S156361](#)

[Free PMC article](#)

> [Biofactors.](#) 2020 Jan;46(1):136–145. doi: 10.1002/biof.1579. Epub 2019 Oct 17.

microRNA-29b inhibits cell growth and promotes sensitivity to oxaliplatin in colon cancer by targeting FOLR1

Qiang Fu ¹, Jindai Zhang ¹, Gaofeng Huang ¹, Yonglei Zhang ¹, Minghai Zhao ¹, Yongchao Zhang ¹, Jianguo Xie ¹

Affiliations + expand

PMID: 31621972 DOI: [10.1002/biof.1579](#)

> [Biofactors.](#) 2020 May;46(3):465–474. doi: 10.1002/biof.1602. Epub 2019 Dec 30.

Long noncoding RNA Mirt2 prohibits lipopolysaccharide-evoked HK-2 cell injury via modulation of microRNA-126

Cui Bai ¹, Nana Nie ¹, Yushan Li ², Chong Zhang ¹, Min Xu ¹, Zipu Li ³

Affiliations + expand

PMID: 31889348 DOI: [10.1002/biof.1602](#)

PAPEI

I.Publisher
?
CN
ID 208496
≡ Selections
♥ Favorites 0
✓ Cart 0

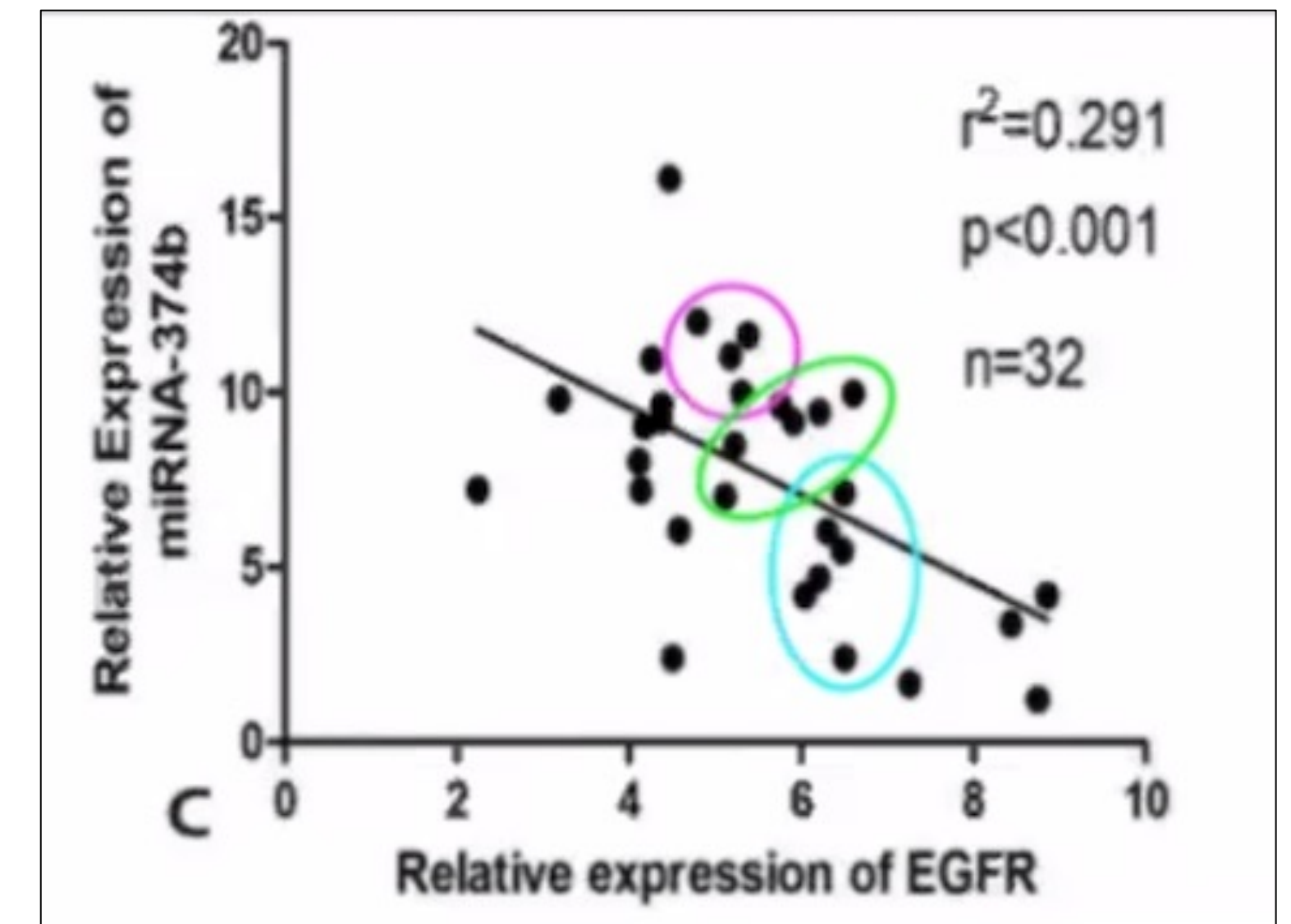
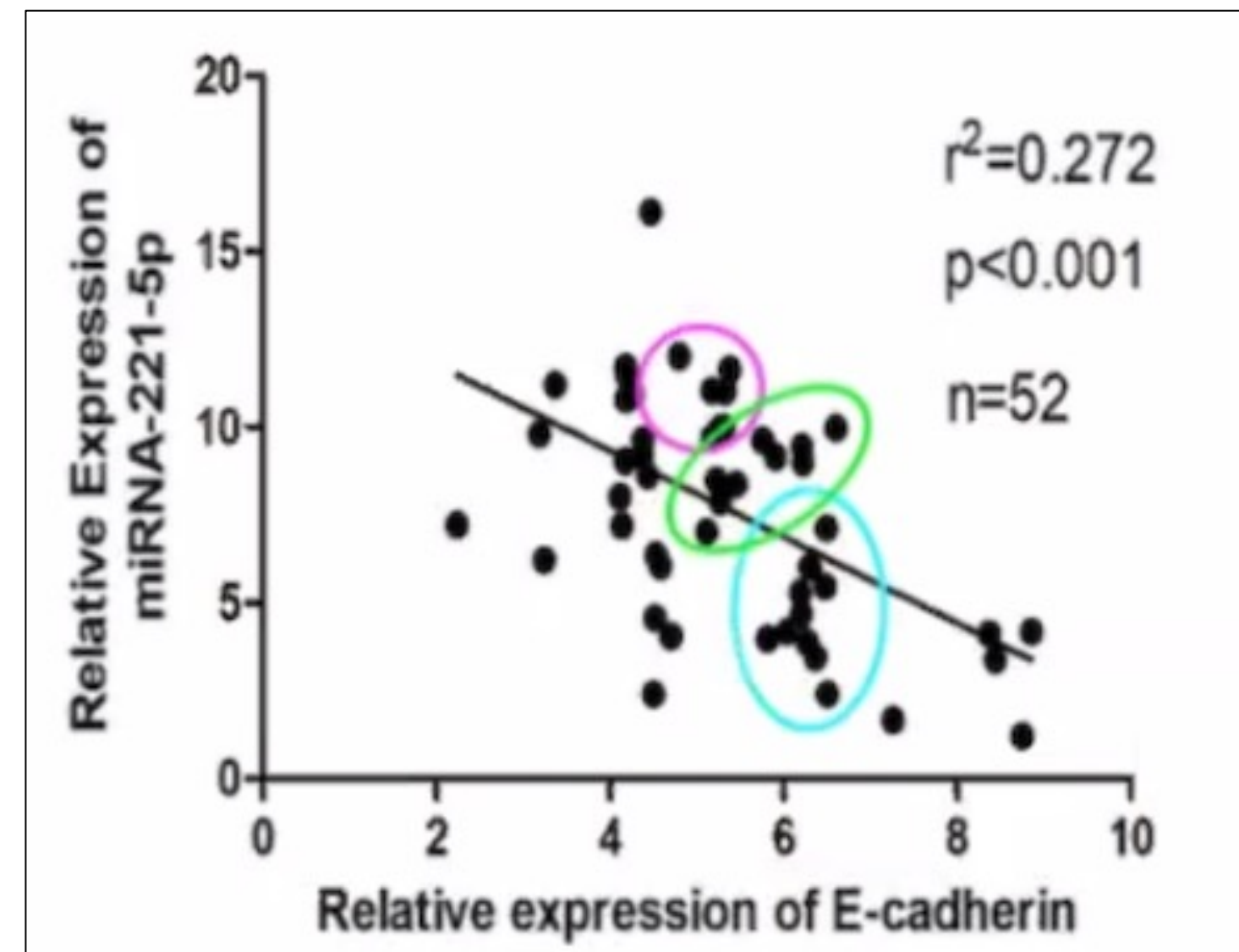
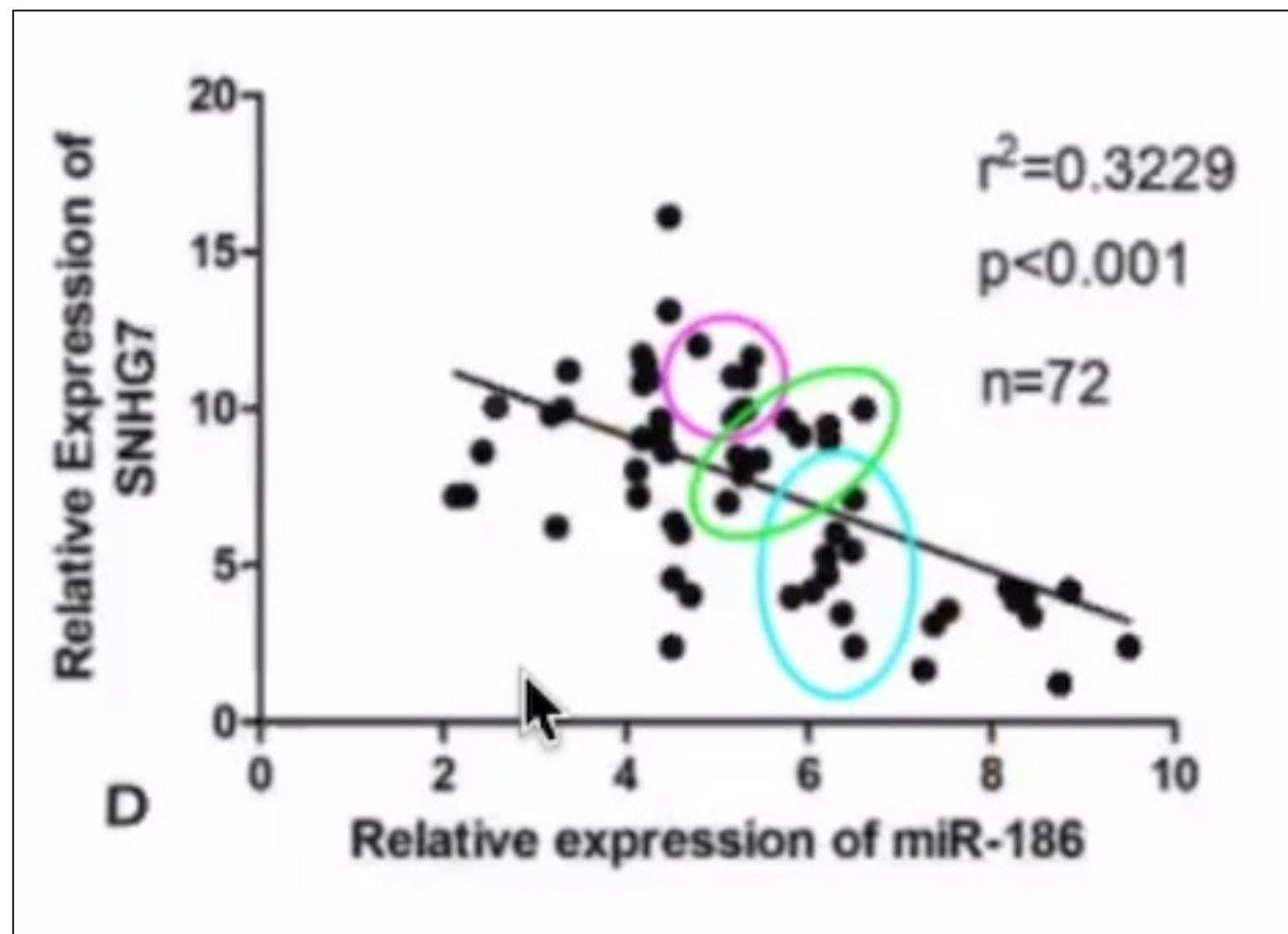
Clear filters
Filter

WhatsApp
elvira.pillipchuk@mail.ru
Все контакты
Found 9558 out of 11767 manuscripts
Page 1 of 20

Publication date / Available to buy up to	Place of the author in the authorship list / Price		Topic	Keywords	Description acc to Scopus base
#14 February 2024 12-10-2022 deadline	1 place - 860 USD. 2 place - 780 USD. 3 place - 710 USD. 4 place - 630 USD. 5 place - 550 USD.	<input type="button" value="♥ to Favorites"/> <input type="button" value="Full info"/>	#14 Entrepreneurial education in the study of information systems management strategies		Scopus Q3 Percentile 20.39
#35 February 2024 12-10-2022 deadline	1 place - 860 USD. 2 place - 780 USD. 3 place - 710 USD. 4 place - 630 USD. 5 place - 550 USD.	<input type="button" value="♥ to Favorites"/> <input type="button" value="Full info"/>	#35 The economic potential of renewable energy sources	solar power plant, renewable energy, net present value, photovoltaic system, installed capacity	Scopus Q3 Percentile 30.49
#59 January 2024 12-10-2022 deadline	1 place - 860 USD. 2 place - 780 USD. 3 place - 710 USD. 4 place - 630 USD. 5 place - 550 USD.	<input type="button" value="♥ to Favorites"/> <input type="button" value="Full info"/>	#59 Water scarcity, mechanization of agricultural processes		Scopus Q3 Percentile 20.39
#103 February 2024 12-10-2022 deadline	1 place - 620 USD. 2 place - 560 USD. 3 place - 500 USD. 4 place - 450 USD. 5 place - 390 USD.	<input type="button" value="♥ to Favorites"/> <input type="button" value="Full info"/>	#103 RECOLTIVATION OF INDUSTRIAL DUMPS OF MINING ENTERPRISES		Scopus Q4 Percentile 1.20
#110 February 2024 12-10-2022 deadline	1 place - 620 USD. 2 place - 560 USD. 3 place - 500 USD. 4 place - 450 USD. 5 place - 390 USD.	<input type="button" value="♥ to Favorites"/> <input type="button" value="Full info"/>	#110 The importance of forest ecosystem services in the development of forestry in the region		Scopus Q4 Percentile 1.20
#112 February 2024	1 place - 620 USD. 2 place - 560 USD.	<input type="button" value="♥ to Favorites"/>	#112		Scopus Q4

PAPER MILLS

Similar title structure but also similar data/graphs/figures



PAPER MILLS

Similar title structure but also similar data/graphs/figures

Dodgy email address

***Correspondence:**

Jiang Duan

duanjiang250@126.com

✉ wzf2146@163.com

✉ suqiang1983@foxmail.com

PAPER MILLS

Similar title structure but also s
data/graphs/figures

Dodgy email address

Sometimes dodgy results too

(Big) hint!



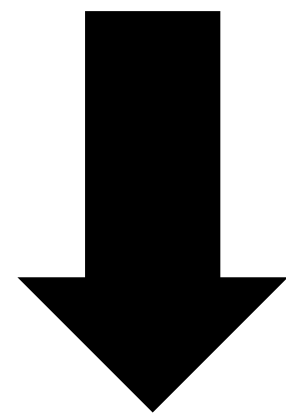
MiR-605-3p inhibits malignant progression of prostate cancer by up-regulating EZH2

Table 1. Association of miR-605-3p expression with clinicopathologic characteristics of prostate cancer.

Parameters expression	Number of cases	miR-605-3p		<i>p</i> -value
		High (%)	Low (%)	
Age (years)				
<60	20	12	8	0.964
Gender				
Male	25	17	8	0.236
Female	27	14	13	
T stage				0.043
T1-T2	31	22	9	0.002
T3-T4	21	9	12	
Lymph node metastasis				
No	33	25	8	0.033
Yes	19	6	13	
Distance metastasis				
No	38	26	12	0.033
Yes	14	5	9	

PAPER MILLS

Consequences ?



Losing money

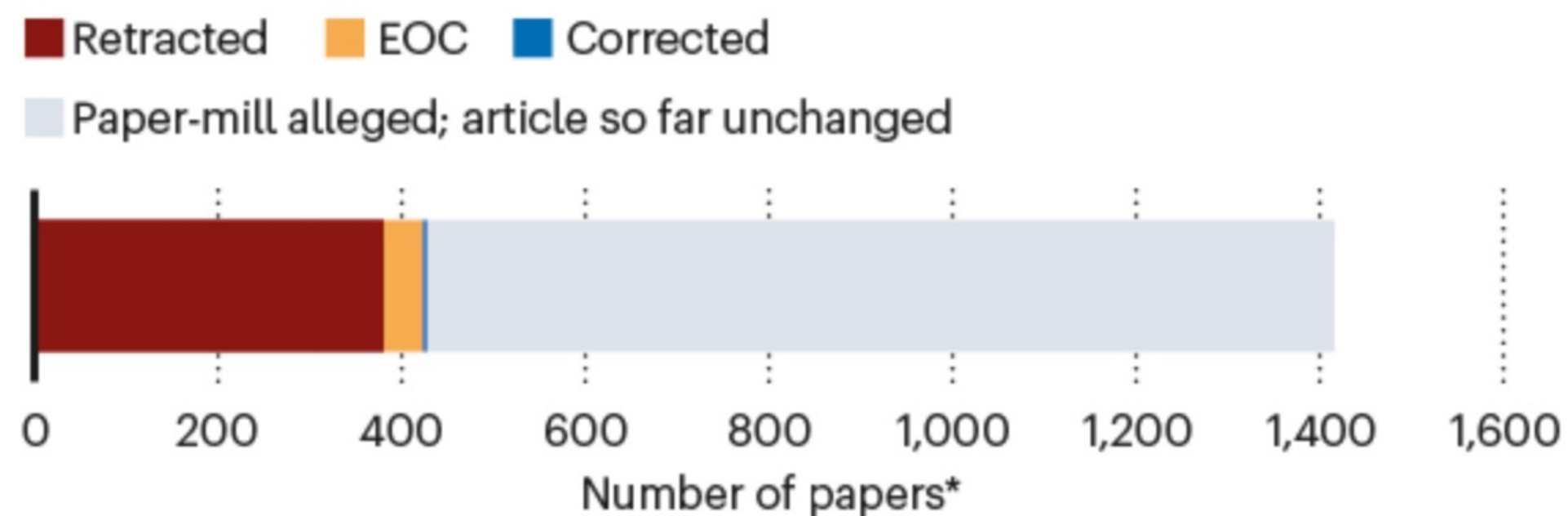
Losing time

Losing energy

Totally fake articles cited by others and used as a basis for new research

FRAUD ALLEGATIONS

Since January 2020, independent sleuths and journals have flagged more than 1,000 published papers potentially linked to paper mills — companies that produce fraudulent articles. Hundreds of these papers have been retracted, corrected or labelled with an expression of concern (EOC).



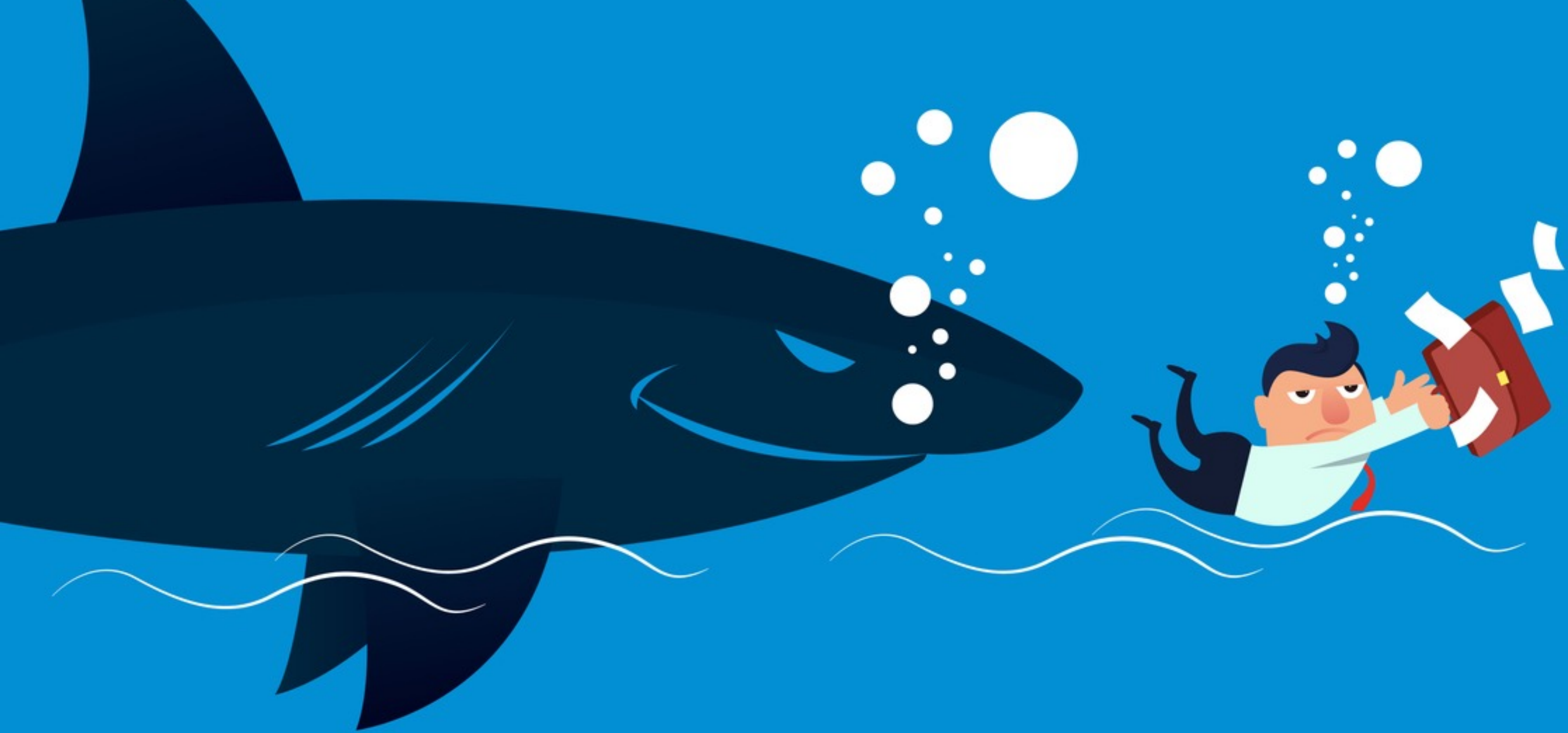
*All papers include authors from Chinese hospitals. Another 197 articles (at least) with authors at Chinese hospitals have been retracted since January 2020. These are not ones that have made it onto lists of potential publication-mill products. Data collated by Nature up to 18 March.

©nature

Byrne et al. found 700 articles from paper mills out of 12K articles about human genomics.

Want to read a bit more?

COPE & STM. Paper Mills – Research report from COPE & STM – English.
<https://doi.org/10.24318/jtbG8IHL>



PREDATORY JOURNALS

PREDATORY JOURNALS

= fake journals

- No real editorial board and peer-reviewing
- Promising low publication fee
- Promising fast publication

Tempting for researchers!



But articles published in predatory journals can't be taken into account for your CV.

PREDATORY JOURNALS

- Aggressive or flattering invitation (often in Spam)

Indésirables — Google

254 messages, 253 non lus

• **Nouveau montant** avant-hier
 ✔ Vous avez reçu 10,450.82 € de la part de Benoi...
 Payment
 N°8EFDATL06QBFZJEOHVQS56AW86G070HEX1PV...

• **mbardiau** avant-hier
 Obtenir un bonus de bienvenue de 888 euros.
 our support forum at the bottom. Your membership
 delivers faster reservations and rentals, a special m...

• **Uw-pakketje** avant-hier
 Pakket BE3428632-20 is verzonden naar uw
 ADRES ONTBREEKT Gelieve ons een geldig adres te
 verstrekken om dit probleem op te lossen. Uw adres...

• **✔ -Centre-de-distribution-✔** avant-hier
 📦 >> Votre colis est en route.<< 📦
 Dear TXUZGGSZ TXUZGGSZ, Welcome to the
 Enterprise Plus? membership experience. Your Ente...

• **Health Science Editor** avant-hier
 Publish your Scholarly Article on Public Health
 Journal of Health Science Studies Dear Dr. Marjorie
 Bardiau, Journal of Health Science Studies is an inte...

• **BitCoin** avant-hier
 📦 **FINAL--NOTICE** 📦 Mbardiau Your Payout: 💰 4...
 --000000000000B0MNRUNyYR84HR9a Content-
 Type: multipart/alternative; boundary="0000000000...

• **Mbardiau** 30/09/21
 Je hebt een betaling van € 20.519,08 ontvangen o...
 Thu, 30 Sep 2021 16:07:50 -0400 transactie-ID:
 OLK60406XT572463F Thu, 30 Sep 2021 16:07:...

• **Bouygues** 30/09/21
 mbardiau , Vous ne devriez pas laisser cela arrive...
 --15M-HLAXWWB2W-HZCICHT-FCVKEF-5IBJ
 Content-Type: multipart/alternative; boundary="36V...



Health Science Editor
 Publish your Scholarly Article on Public Health
 À : Marjorie Bardiau

Indésirables - Google avant-hier à 04:54

Journal of Health Science Studies

Dear Dr. Marjorie Bardiau,

Journal of Health Science Studies is an international online journal that publishes various types of articles that includes research, review articles, short communications, and many more in the **Health Science** research.

Based on your eminent expertise and immense contributions, we warmly solicit your participation in the **Journal of Health Science Studies** for the upcoming regular issue.

-Online Submission link [Click here to submit your manuscript](#)

Looking forward to having your association with us!

Sincerely,
 Jennifer Brown
 Journal of Health Science Studies

To stop receiving these emails, [Unsubscribe](#)

PREDATORY JOURNALS

- Aggressive or flattering invitation (often in Spam)
- Unprofessional websites

The screenshot shows the ANNEX PUBLISHERS website. At the top, there are logos for NLM CATALOG, INDEXING, Crossref, DOI Prefix 10.15744, and PORTICO. On the right, there are links for Author Login and Contact, and an email address: mail@annexpublishers.org. The main header features the ANNEX PUBLISHERS logo with the tagline "Radical Novelty of Research" and navigation links for GUIDELINES, SUBMIT MANUSCRIPT, and FAQs. A red box with the text "Can't click on any link" is overlaid on the navigation links. Below the header, there are links for NIH FUNDED ARTICLES, PubMed, and Endothelial Cells Ma, along with a RECENT ARTICLES link. The main content area features a large image of a stethoscope and a glass vial, with a red box containing the text "Really slow" overlaid on it. Below the image, there is a call to action: "PUBLISH YOUR RESEARCH PAPERS". At the bottom, there is a phone number "10-8845" and a text box stating: "Annex Publishers is the center for researchers and scientists who work together to bring a vastly improved tomorrow for human race." On the right side, there are four journal listings, each with a thumbnail image, the journal title, and a "View Recent Articles" link. The journals listed are: Journal of Pharmaceutics & Drug Development, Journal of Forensic Science & Criminology, Journal of Case Reports and Studies, and Journal of Nutrition and Health Sciences.

PREDATORY JOURNALS

- Aggressive or flattering invitation (often in Sapm)
- Unprofessional websites
- Author (and not reader) oriented

NLM CATALOG INDEXING Crossref DOI Prefix 10.15744 PORTICO

>> Author Login >> Contact

E-mail: mail@annexpublishers.org

ap ANNEX PUBLISHERS
Radical Novelty of Research

HOME ABOUT JOURNALS GUIDELINES SUBMIT MANUSCRIPT FAQs

NIH FUNDED ARTICLES PubMed Endothelial Cells Ma RECENT ARTICLES

PUBLISH YOUR RESEARCH PAPERS

Journal of Pharmaceutics & Drug Development
View Recent Articles

Journal of Forensic Science & Criminology
View Recent Articles

Journal of Case Reports and Studies
View Recent Articles

Journal of Nutrition and Health Sciences
View Recent Articles

ANNEX Publishers is the center for researchers and scientists who work together to bring a vastly improved tomorrow for human race.

PREDATORY JOURNALS

- Aggressive or flattering invitation (often in Sapm)
- Unprofessional websites
- Author (and not reader) orientec
- Too easy to submit

SUBMIT MANUSCRIPT

Please do go through our manuscript instructions and guidelines before submitting a manuscript, kindly read them carefully. Manuscripts/ Articles must be submitted in accordance with guidelines. Articles that are not in the required format would likely to be rejected.

NEXT

EXISTING USER

NEW USER

FIRST NAME

Enter Your First Name

AFFILIATION

Enter Your Affiliation

JOURNAL NAME

--Please select--

ARTICLE TITLE

Enter Your Article Title

LAST NAME

Enter Your Last Name

COUNTRY

UNITED STATES

CLASSIFICATION

Please Select ...
Biological science
cardiology diagnostic tests
cardiovascular therapy
Food Addiction

KEYWORDS

Enter Your Keywords

EMAIL ADDRESS

Enter Your Email ID

PHONE NUMBER

Enter Your Phone Number

ARTICLE TYPE

--Please select--

PREDATORY JOURNALS

A tool to help you: Compass to publish  LIÈGE université
Library

Compass to Publish

University of Liège ULiège Library 



Test a journal

Predatory journals and publishers ▾

Methodology

About ▾

1. Trusted lists

unspecified journal

End the test

1.1. Is the journal indexed in the DOAJ (*Directory of Open Access Journals*)? Check here. 

Yes No I don't know



Progress

Next

 FEEDBACK

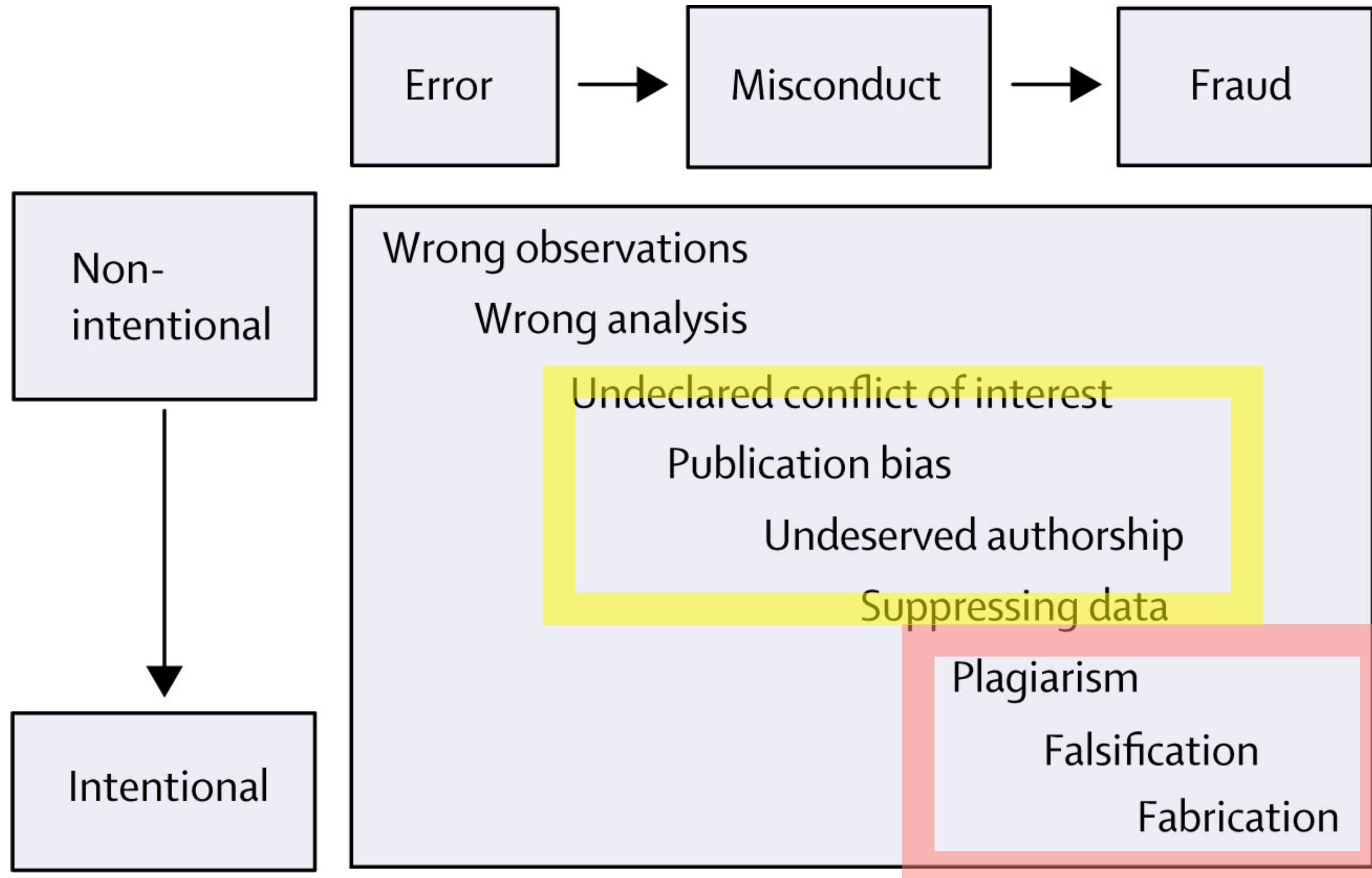
Follow Us





BORDELINE BEHAVIOUR THE GREY ZONE

BORDERLINE BEHAVIOUR



BORDERLINE BEHAVIOUR

Novelty > solid or null results

- Publication biases

Articles should be novel, innovative, ground-breaking, original, important, etc

nature

Aims & Scope

Nature is a weekly international journal publishing the finest peer-reviewed research in all fields of science and technology on the basis of its originality, importance, interdisciplinary interest, timeliness, accessibility, elegance and surprising

Consequences ? Favour ground-breaking articles,

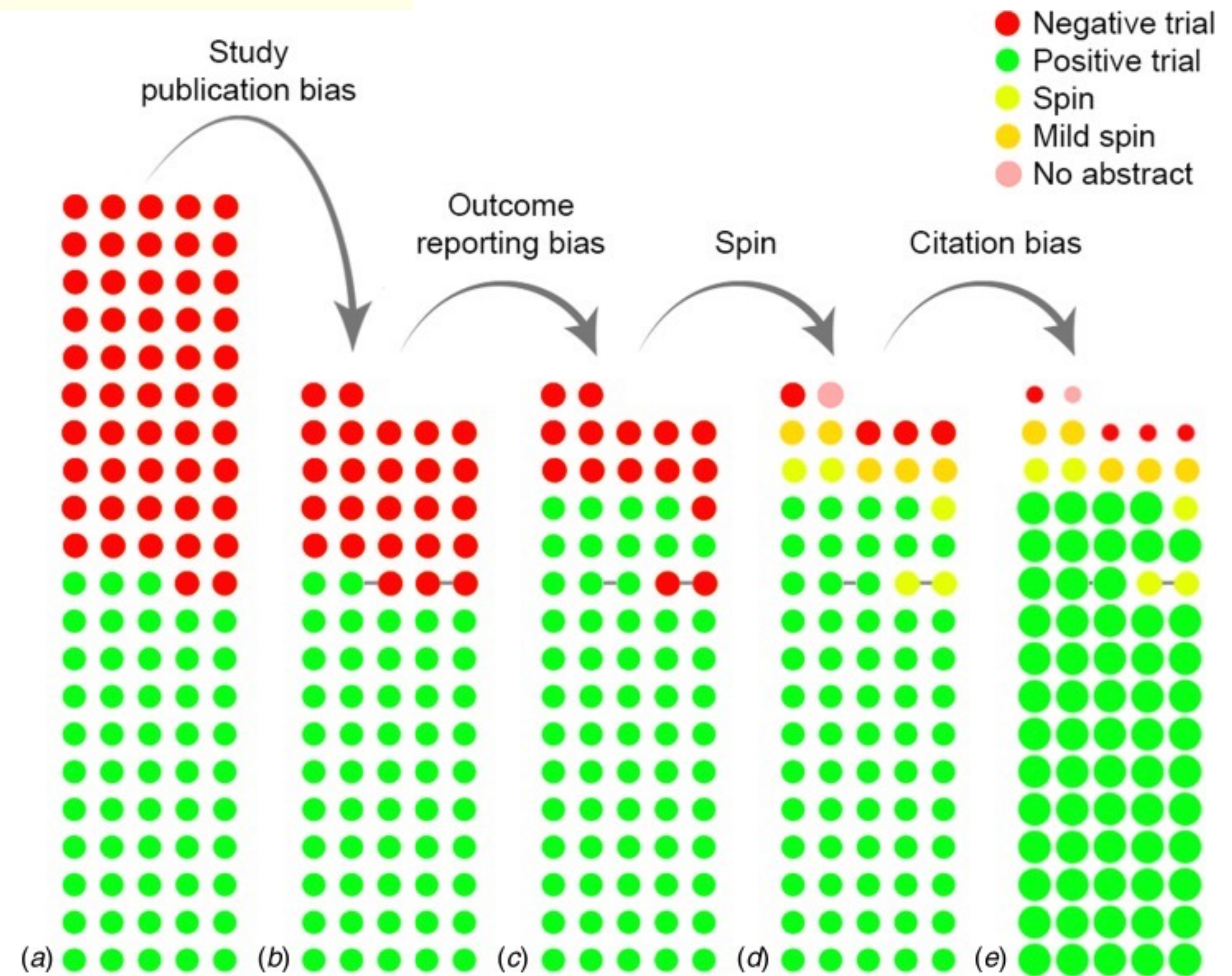
not null results or less fashionable topics but with solid methodology

Bias +++

BORDERLINE BEHAVIOUR

Example with antidepressants

- Publication biases



Consequences ? Bias in studies results and meta-analyses

BORDERLINE BEHAVIOUR

- Publication biases
- P-hacking

Try to reach the $p < 0,05$ holy grail

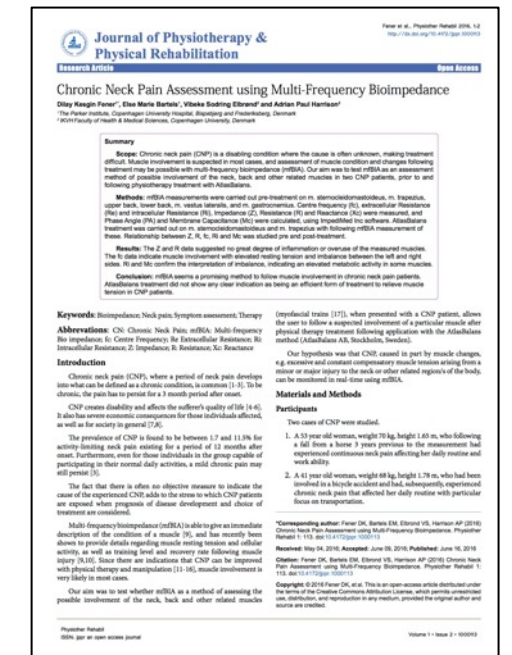
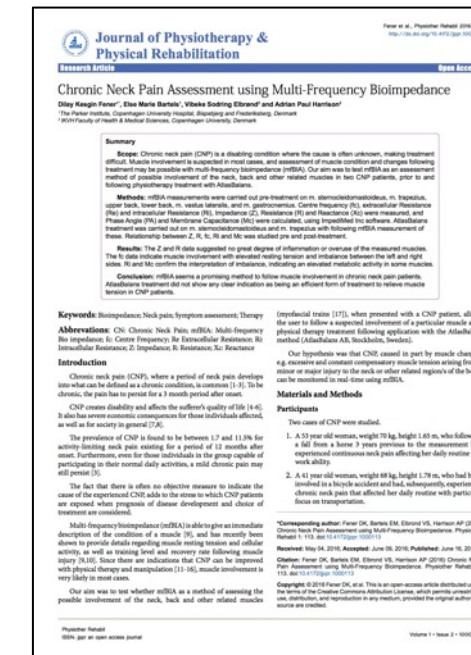
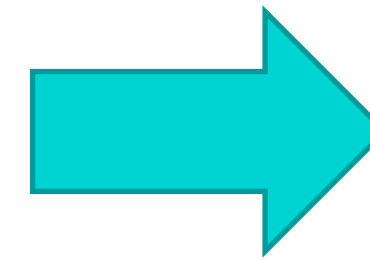
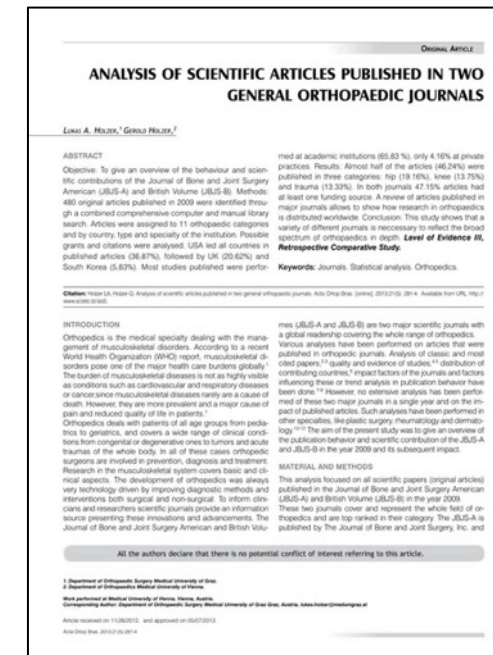
- Doing experiments until reaching $p < 0,05$
- Changing the scope of the research/article depending on the p-value results

Consequences ? This is not very scientific

BORDERLINE BEHAVIOUR

One study sliced in several articles

- Publication biases
- P-hacking
- Salami-slicing



Consequences ? For MD, not the full picture about treatments if sliced in several publications

BORDERLINE BEHAVIOUR

- Publication biases
- P-hacking
- Salami-slicing
- Authorship/ties issues

Ghost authorship

- Hyperprolific authors (1 paper every 5 days, >9000 authors)
- Why are authors added? Do they really qualify as authors?

Ties with editors and journals

- Is publishing in the same journal(s) because of your ties with editors/publishers ethical?
- Conflict of interests



IS THERE ANY HOPE?

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level



Just try not to be like all these bad scientists

Report any research misconduct

pubpeer.com

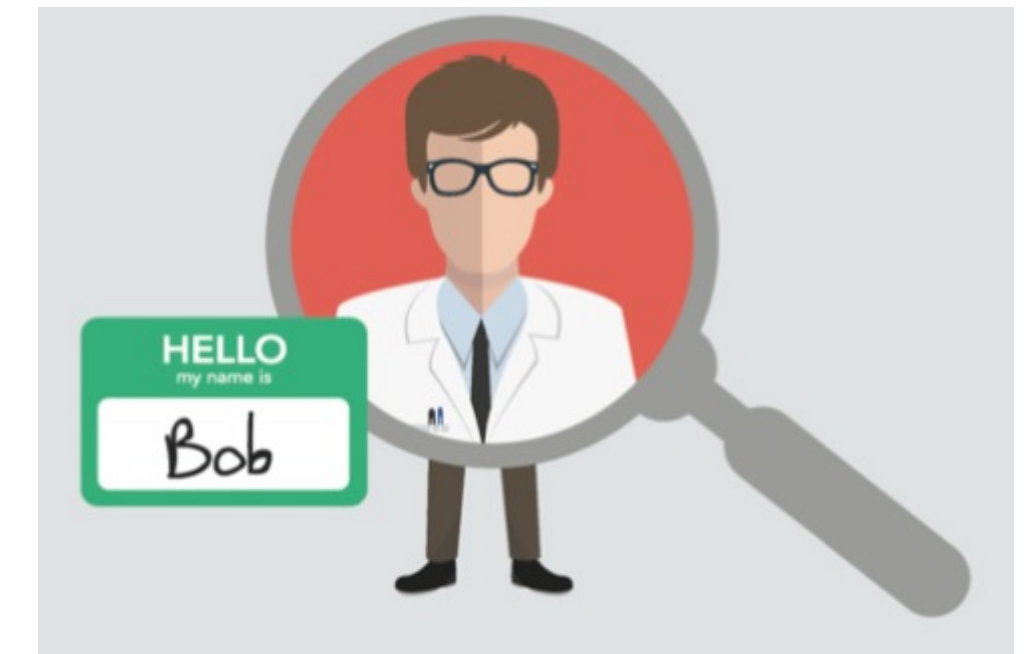
Contact the journal editor

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level

OPEN DATA



OPEN DATA is the practice of making the data accompanying or underlying your research:

- Findable, Accessible, Interoperable, Reproducible (FAIR principles)
- Your results are not fabricated
- You do not extrapolate results from your data

Open Data can minimize the risk of data falsification and fabrication

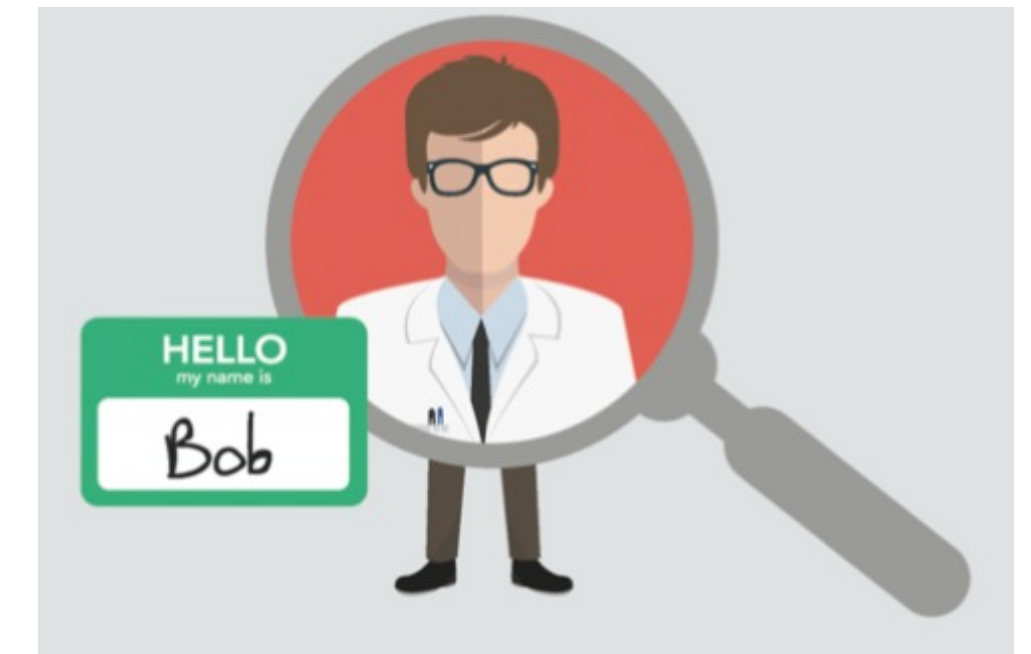
! Use a data repository to publish your data and to [make it FAIR](#) ([Zenodo](#), [Harvard Dataverse](#), ...)

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level

OPEN (POST) PEER REVIEW



Open and post peer review can help improve and correct the scientific record

- Participate in post peer reviewing if you have doubts/questions/suspicious about particular research: pubpeer.com
- Contact/Alert journal editors if necessary
- Make use of open peer review options on publishing platforms ([F1000](#), [peerJ](#), etc.)
- Find journals using Open Peer Review on the [DOAJ](#) (Directory of Open Access Journals)

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level

PUBLISH RESPONSIBLY



- Do not privilege quantity over quality
- Do not mistake prestige for quality
- Consider no-fees publishing venues
- Help create more bibliodiversity
- Do not just privilege novel/hype results (vs null results)

A screenshot of the DOAJ website's search interface. At the top, there is a navigation bar with the DOAJ logo, a "SUPPORT" link with a heart icon, and an "APPLY" dropdown menu. Below the navigation bar, the word "SEARCH" is displayed in orange. The main heading is "Journals" with a question mark icon. There is a search input field containing an asterisk (*), a dropdown menu set to "All fields", and a search button with a magnifying glass icon. Below the search bar, there is a "SHARE OR EMBED" button. At the bottom of the screenshot, it shows "12,824 indexed journals", a "Refine search results" link, and two filter buttons: "Without article processing charges (APCs)" and "CLEAR ALL".

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- **Researcher level**

CREDIT: authorship

CRedit (Contributor Roles Taxonomy) is a high-level taxonomy, including 14 roles, that can be used to represent the roles typically played by contributors to research outputs. The roles describe each contributor's specific contribution to the scholarly output.

- **CREDIT** can help prevent ghost authorship and/or disambiguate authorship/contributorship issues by clearly defining roles with the help of a taxonomy
- transparent process
- Used by many stakeholders (publishers, journals, platforms)
- Can be added on platforms (metadata), on manuscripts, in appendix

Conceptualization

Resources

Data curation

Software

Formal Analysis

Supervision

Funding acquisition

Validation

Investigation

Visualization

Methodology

Writing – original draft

Project administration

Writing – review & editing

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level
- PI level

Train your PhD students

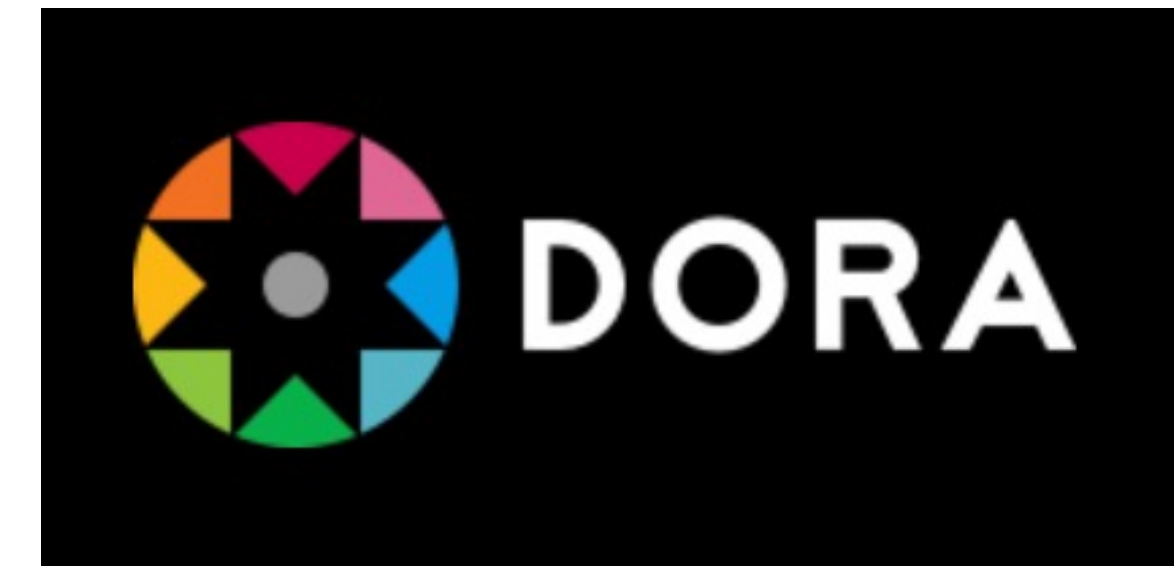
Take the time to properly mentor them

Lead by the example and promote research integrity

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level
- PI level
- Institution/university level



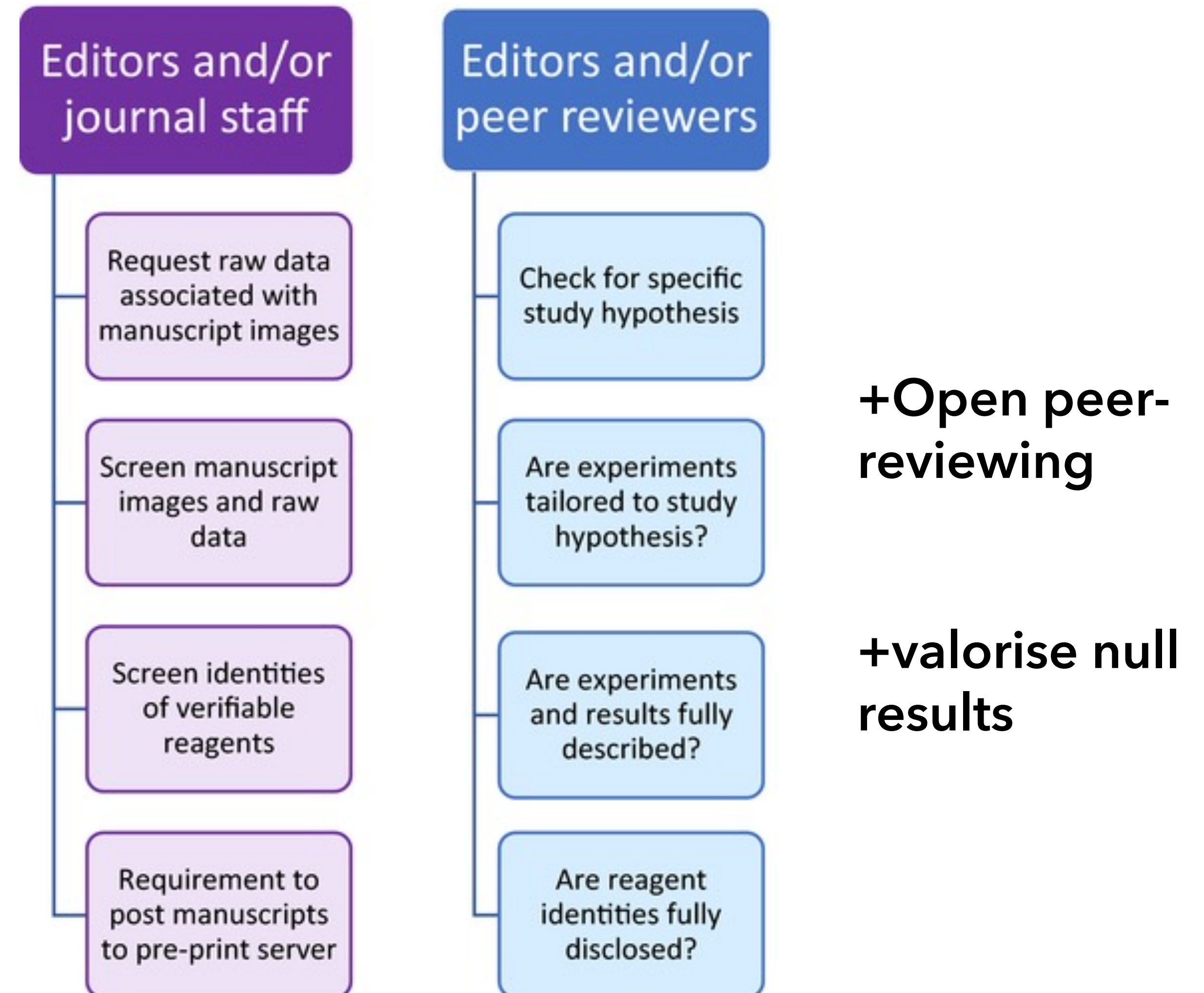
The Declaration on Research Assessment (DORA) recognizes the need to improve the ways in which the outputs of scholarly research are evaluated.

- 23,036 individuals and organizations
- 160 countries
- 24 institutions in Belgium

WE CAN ALL PROMOTE RESEARCH INTEGRITY

(and live in a better (academic) life)

- Researcher level
- PI level
- Institution/university level
- Editor/publisher level



THANK YOU

MARJORIE BARDIAU
MBARDIAU@ULIEGE.BE

