



How to publish with  
*Genome Biology*

Yixin Yao

— Jun 2017

**SPRINGER** **NATURE**

# About me

Associate Editor of Genome Biology

Graduated from New York University with a PhD  
in Environmental Health Sciences,

Have long histories with Shanghai Jiaotong  
University and NYU

Joined Genome Biology in January 2016.



- **SPRINGER NATURE** | Room 10-11, 42<sup>nd</sup> Floor, The Center | No. 989 Changle Road
- Xuhui District | **Shanghai** | China 200031
- T: +86 (0)21 2422 5102
- C:+86 1333 1981 036

# Today we will cover...

- How to get published with *Genome Biology*
  - Who are we (*Genome Biology*)
  - Before submitting your paper (what editors want)
  - Responding to editors and reviewers
  - Dealing with rejection
  - Tips to summarize

# Today we will cover...

- How to get published with Genome Biology
  - *Who are we (Genome Biology)*
  - Before submitting your paper (what editors want)
  - Responding to editors and reviewers
  - Dealing with rejection
  - Tips to summarize

- Launched in 2000
- Outstanding Open Access journal for research in genomics
- Open Access can = high impact
- Ranked No.1 in Life Science OA journals by GoOA (CAS)  
BioMed Central隶属于Springer Nature出版集团，是世界上开放获取出版的先锋，发表生物、医学领域的最新科研成果。目前拥有300多本开放获取期刊，其中近200本拥有影响因子。期刊**Genome Biology** (IF: 11.313)、**BMC Biology** (IF: 6.967)、**BMC Medicine** (IF: 8.005)、**Genome Medicine** (IF: 5.7)为旗下4本旗舰刊，

- Outstanding genomic research in all areas of biology and biomedicine
- Genomics as a tool
- The biology of genomes (and proteomes, epigenomes, etc)

## Single Cas9 nickase induced generation of *NRAMP1* knockin cattle with reduced off-target effects

[Yuanpeng Gao](#)<sup>†</sup>, [Haibo Wu](#)<sup>†</sup>, [Yongsheng Wang](#)<sup>†</sup>, [Xin Liu](#), [Linlin Chen](#), [Qian Li](#), [Chenchen Cui](#), [Xu Liu](#), [Jingcheng Zhang](#) and [Yong Zhang](#) 

<sup>†</sup> Contributed equally

*Genome Biology* 2017 18:13 | DOI: 10.1186/s13059-016-1144-4 | © The Author(s). 2017

Received: 16 August 2016 | Accepted: 21 December 2016 | Published: 1 February 2017

## Genomic insights into divergence and dual domestication of cultivated allotetraploid cottons

[Lei Fang](#)<sup>†</sup>, [Hao Gong](#)<sup>†</sup>, [Yan Hu](#)<sup>†</sup>, [Chunxiao Liu](#)<sup>†</sup>, [Baoliang Zhou](#), [Tao Huang](#), [Yangkun Wang](#), [Shuqi Chen](#), [David D. Fang](#), [Xiongming Du](#), [Hong Chen](#), [Jiedan Chen](#), [Sen Wang](#), [Qiong Wang](#), [Qun Wan](#), [Bingliang Liu](#), [Mengqiao Pan](#), [Lijing Chang](#), [Huaitong Wu](#), [Gaofu Mei](#), [Dan Xiang](#), [Xinghe Li](#), [Caiping Cai](#), [Xiefei Zhu](#), [Z. Jeffrey Chen](#), [Bin Han](#), [Xiaoya Chen](#), [Wangzhen Guo](#), [Tianzhen Zhang](#)  and [Xuehui Huang](#) 

<sup>†</sup> Contributed equally

*Genome Biology* 2017 18:33 | DOI: 10.1186/s13059-017-1167-5 | © The Author(s). 2017

Received: 17 December 2016 | Accepted: 6 February 2017 | Published: 20 February 2017

Our aims: high visibility for our authors' work



**BT**

We've helped m... digital nations...

**GEN News Highlights**

February 1, 2017

**CRISPR Variant Produces Tuberculosis-Resistant Cows**

[Find out more >](#)



# World's first tuberculosis-resistant cows are created in China using 'cut and paste' gene-editing techn

- Researchers used gene editing technology, known as CRISPR
- This allowed them to insert a new gene into the cow's genetic
- When exposed to bovine TB bacteria the researchers found t... animals showed an increased resistance



Science Ticker

## CRISPR used in cows to help fight tuberculosis



Click Image To Enlarge +

Researchers used a novel version of the CRISPR system called CRISPR/Cas9n to successfully insert a tuberculosis resistance gene into the cow genome. [NIH]

# Our aims: excellent customer service

- Fast. Proactive. High quality.

“All of us are pleased to have the chance to contribute to science community, especially through your open access publication system. We find overall, the **review process of Genome Biology has been excellent** and we are grateful for your work.” – **Professor Jong Bhak, UNIST, South Korea**

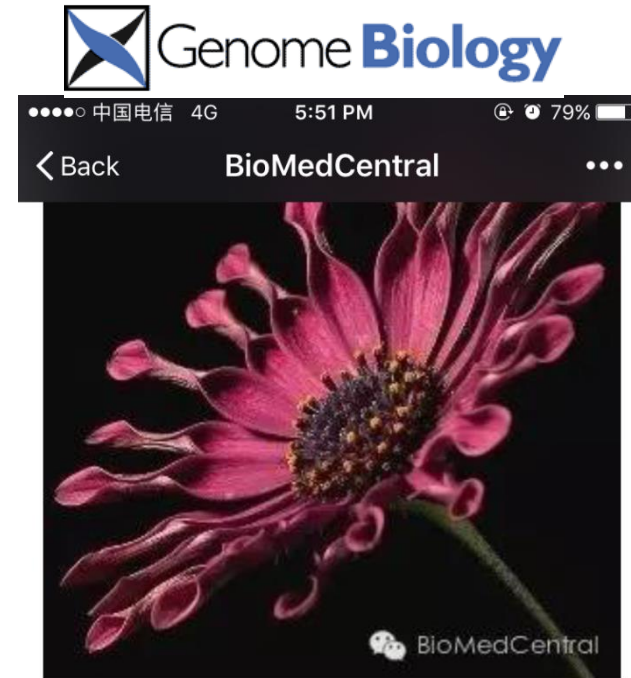
“I would also like to thank you for your very **professional handling** of our manuscript. Your **clear communication** regarding what has been required from our side has helped a lot and we are all impressed by your work. I wish more editors would work like you do.” – **Dr Anders Andersson, Royal Institute of Technology, Sweden**

“It's such a wonderful opportunity to interact with you and to have our manuscripts considered by Genome Biology. The **transparency** of the journal and the way the manuscripts are **handled in a fair, balanced and insightful way** should be commended.” **Dr Jorge Reis-Filho, MD, PhD, Memorial Sloan Kettering Cancer Center, USA**



# Provide excellent service and make an impact in China

- Dedicate an in-house editor in China
- 2 SI every year to promote excellent research
- WeChat promotions for Chinese audience
- Special handling (fast track peer review by EBM/personal favour) per request



**Genome Biology**将于2017年上半年推出植物表观遗传学特刊来涵盖表观遗传在植物各表型变化上的调控。来自明尼苏达大学的Nathan Springer 以及瑞典农业科学大学的Claudia Köhler应邀担任本期特刊的客座编辑。点击'阅读原文'详细了解本期特刊的征稿题材以及截稿日期。

现在就向我们投稿吧，期待您出色的研究工作！

**SPRINGER NATURE**

# GWAS精细定位——杨剑教授点评

2042 Clickthrough  
29 like

Original 2017-05-16 BMC 中国

BioMedCentral开放获取出版

RESEARCH

Quantifying the mapping precision of genome-wide association studies using whole-genome sequencing data

Understanding the mapping precision of genome-wide association studies (GWAS), that is the physical distances between the top associated single-nucleotide polymorphisms (SNPs) and the causal variants, is essen...

Yang Wu, Zhili Zheng, Peter M. Visscher and Jian Yang

*Genome Biology* 2017 18:86

Published on: 16 May 2017

表观遗传与多倍体棉花的进化与驯化——宋庆鑫博士解读



Z. Jeffrey Chen 团队在我们的植物表观遗传学特刊上发表的有关多倍体棉花的工作，被我们编辑选为本

张薇团队揭示染色质重塑因子PKL在RNA介导的DNA甲基化中的功能



BioMed Central旗舰刊Genome Biology最新研究热点。

## Follow us on WeChat !



通讯作者: Z. Jeffrey Chen, 德克萨斯大学奥斯汀 D. J. Sibley 分子遗传百年讲席教授、南京农业大学特聘教授。是世界多倍体, 杂种优势和表观遗传学研究领域的领军人物, 在杂种优势形成的分子机理和与多倍体基因组进化和表观遗传调控等研究领域做了大量研究, 取得了丰硕的成果, 在Nature等刊物上发表学术论文110余篇, 应邀到国内外学术会议和团体作特邀或主题报告160余次, 为Science等50个期刊审稿 任

# Who are we? Our in-house editorial team



Louisa Flintoft, PhD, Editor  
14 years of editorial experience  
BioMed Central employee



- Professional manuscript handling editors
  - All have PhDs
- Specialize in different areas of genomics
  - Handle manuscripts
  - Organize peer review and article promotion
- Editorial Assistant
  - Answers author queries

# How we make decisions

## Who is involved?

- In-house editorial team
- Peer reviewers
- Editorial board – for advice

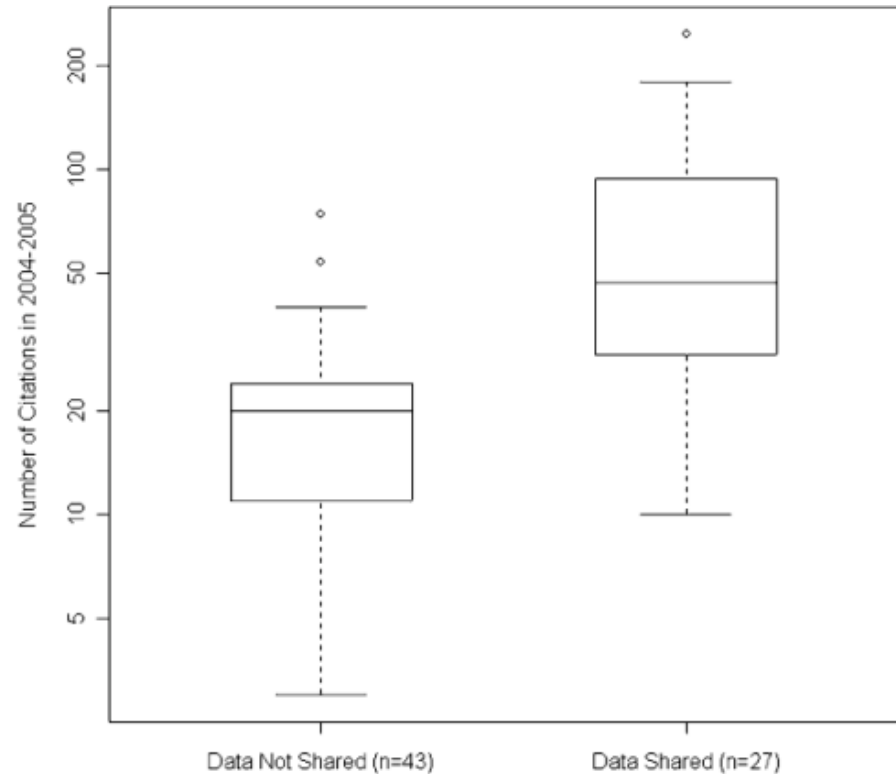
## How we decide

- Scope
- Scientific soundness
- Advance over previous work
- Interest levels
- Ethical requirements
- **Open science requirements**

# Sharing gets you cited

## Sharing Detailed Research Data Is Associated with Increased Citation Rate.

Piwovar HA, Day RS, Fridsma DB (2007)  
 PLoS ONE 2(3): e308.  
 doi:10.1371/journal.pone.0000308



Every 10 datasets collected contributes to at least 4 papers in the following 3-years.

Piwovar, HA, Vision, TJ, & Whitlock, MC (2011). Data archiving is a good investment Nature, 473 (7347), 285-285 DOI: 10.1038/473285a

# Read more of our reasons here

<https://genomebiology.biomedcentral.com/articles/10.1186/s13059-015-0850-7>



## Genome Biology

HOME

ABOUT

ARTICLES

SUBMISSION GUIDELINES

COMMENT | [OPEN ACCESS](#)

### Five selfish reasons to work reproducibly

[Florian Markowetz](#) 

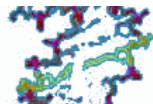
*Genome Biology* 2015 16:274 | DOI: 10.1186/s13059-015-0850-7 | © Markowetz. 2015

Published: 8 December 2015

# Our Open Science requirements

- All data must be made available
- Preferably in a large international repository
- Data must be available BEFORE ACCEPTANCE
- All software and code must be made available ON SUBMISSION
- Implementations must be in an open repository
- All software must have an open source licence

**dbSNP**  
Short Genetic Variations



European  
genome-phenome  
archive



Bioconductor  
OPEN SOURCE SOFTWARE FOR BIOINFORMATICS

**GitHub**

figshare

**GEO**  
Gene Expression Omnibus

**zenodo**

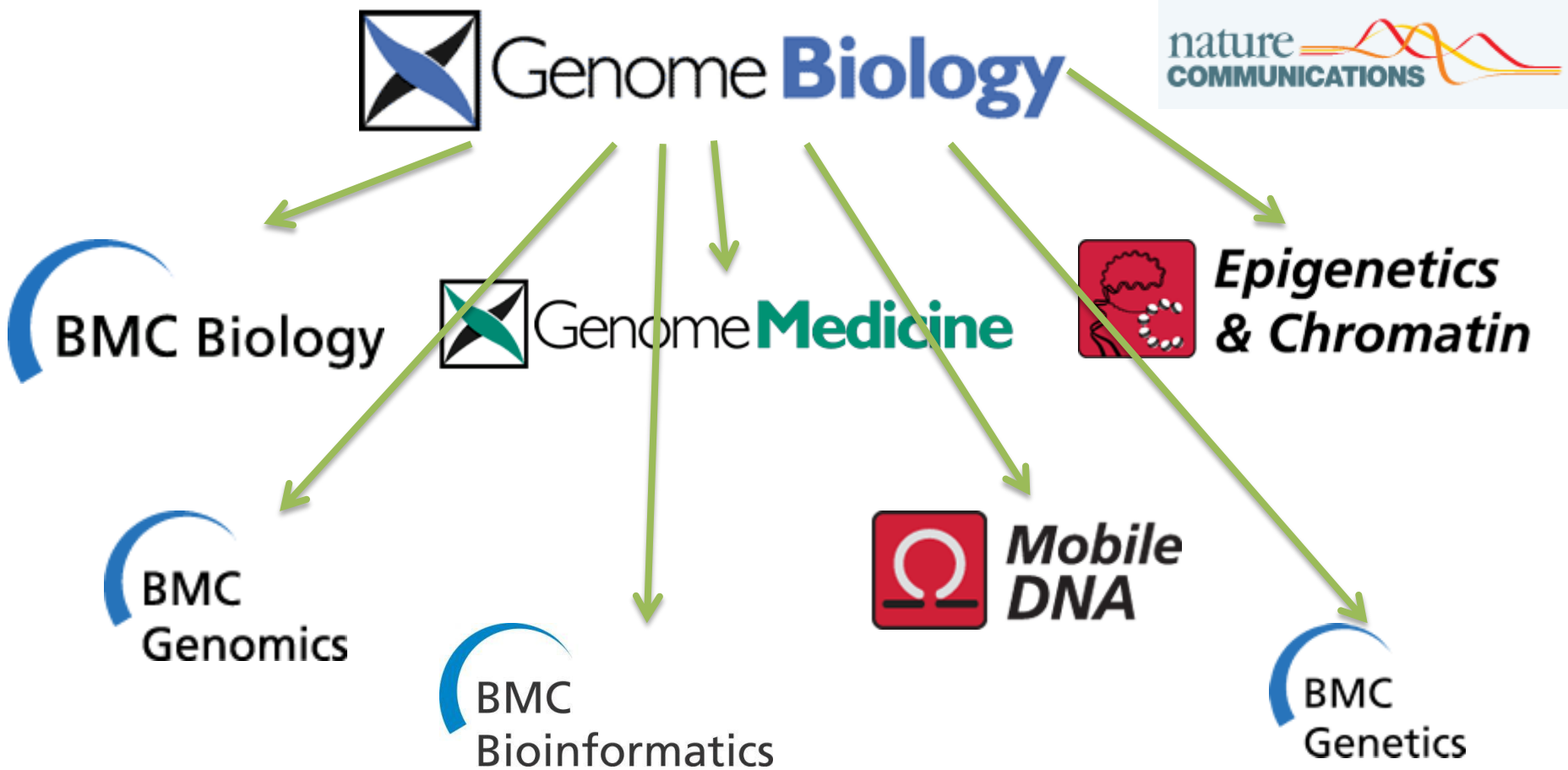
**SOURCEFORGE**

# Examples for relevant repositories

- **DNA/RNA sequencing:** GEO/ENA/DDBJ (these are mirror databases)
- **Raw sequencing reads:** SRA
- **DNA sequences, genome assemblies, sequences of non-coding elements etc:** GenBank
- **Variation data:** dbSNP, EVA, dbVar, DGVa
- **Microarray data:** ArrayExpress/GEO
- **GWAS:** dbGap(gated), EGA (gated) please note that these databases may not accept GWAS results for non-human species
- **Proteomics mass-spec data:**  
ProteomeXchange(PRIDE)
- **Protein interaction data:** IMEx consortium



# Transfers

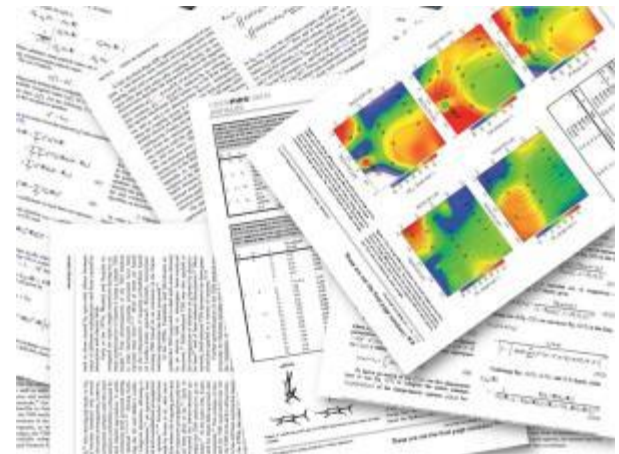


# Today we will cover...

- How to get published with Genome Biology
  - Who are we (*Genome Biology*)
  - Before submitting your paper (what editors want)
  - Responding to editors and reviewers
  - Dealing with rejection
  - Tips to summarize

# Think about publication from the start

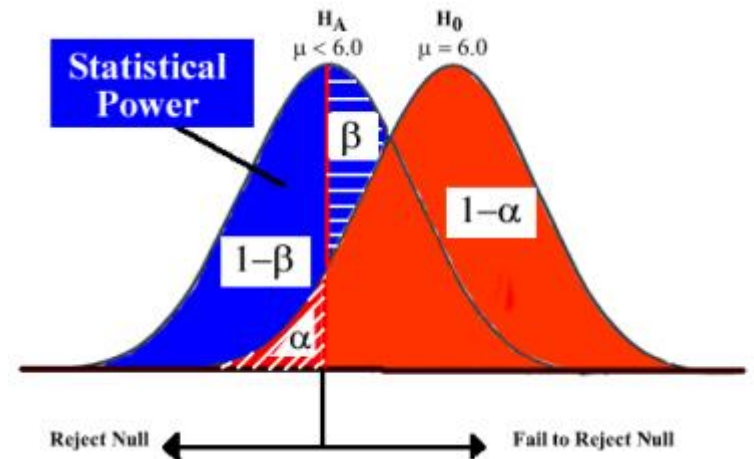
- What are the standards for your journal(s) of choice?
  - Read a lot of papers
- Designing your study
- Replication and validation
- Record your methods and results carefully
- Organize your data
- Get ethical approval



# Think about publication from the start

- What are the standards for your journal of choice?
- **Designing your study**
  - **Sample size and statistical power**
- Replication and validation
- Record your materials, methods and results carefully
- Organize your data
- Get ethical approval

A frequent rebuttal point!



# Think about publication from the start

- What are the standards for your journal of choice?
- Designing your study
- **Replication and validation**
- Record your materials, methods and results carefully
- Organize your data
- Get ethical approval

One of the reasons we reject before review! So read more published articles to get your common sense straight.



# Think about publication from the start

- What are the standards for your journal of choice?
- Designing your study
- Replication and validation
- **Record your materials, methods and results carefully**
- Organize your data
- Get ethical approval

Because the publication of your article doesn't mark "the end" of the story.



# Think about publication from the start

- What are the standards for your journal of choice?
- Designing your study
- Replication and validation
- Record your materials, methods and results carefully
- **Organize and store your data**
- Get ethical approval

We need to consider  
our readers experience



# Think about publication from the start

- What are the standards for your journal of choice?
- Designing your study
- Replication and validation
- Record your materials, methods and results carefully
- Organize your data
- **Get ethical approval**
  - **Informed consent**
  - **Consent to publish**



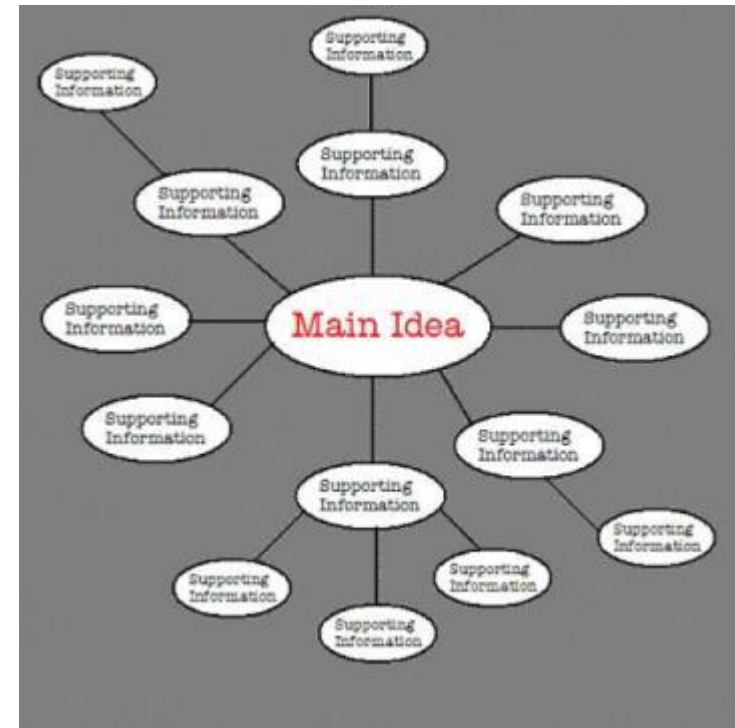


# Writing your paper



# Writing your paper

- Identify your main message
  - Write your introduction around it
  - Present your results to support it
- Be clear about what you did and how
- Keep key information in the main text
- Be objective about your work



# Writing your paper

- Identify your main message
- **Be clear about what you did and how**
  - **Materials and Methods**
- Keep key information in the main text
- Be objective about your work



# Writing your paper

- Identify your main message
- Be clear about what you did and how
- **Keep key information in the main text**
  - Especially important if you prepared the first draft for Nature journals
  - Ask your co-authors to check
- Be objective about your work



# Writing your paper

- Identify your main message
- Be clear about what you did and how
- Keep key information in the main text
- **Be objective about your work**
  - Reviewers will be!
  - Consult language service?



# Choosing a journal

this is critical for keeping the time short from submission to publication



# How to keep the time reasonably short from submission to publication

Research Article

Ask yourself:

- Is there surprising findings, or everything is confirmatory?
- Is there sufficient validation of method used?
- Is there sufficient biological/functional follow up included
- If wet-lab validation not feasible, is there any datasets published that can serve the purpose?

# How to keep the time reasonably short from submission to publication

Method Article

## Ask yourself:

- Is my method of broad application and utility?
- Where is similar methods published
- How much does my method outperform the others
- What's the major obstacle in the field, does my method address the problem?
- Has sufficient datasets included in the comparison?
- Has sufficient details of all method setting included?



# How to keep the time reasonably short from submission to publication

- Communicate with editors:
  - Presubmission inquiry
  - Revision requirements
  - Email or phone call
  - WeChat?

# Submitting your paper

- Check journal formatting guidelines
- Title
- Abstract
- Cover letter

# Why you need a good title, abstract and cover letter

- Editors are busy! (and who is not?)
- You have one chance to impress them.
- Make a good first impression



# Writing a good abstract

What are editors looking for?(go back to the Qs before submission)

- Scope
- **Advance**
- Appropriate methods and study design
- Sample size and statistical power
- **Interest level** (varies between journals)

Things to avoid:

- Lists (for example, of gene names)
- Acronyms and abbreviations
- Lots of technical detail

# Example of a good abstract

## Background

Embryonic lethality is a recognized phenotypic expression of individual gene mutations in model organisms. However, identifying embryonic lethal genes in humans is challenging, especially when the phenotype is manifested at the preimplantation stage.

Explains importance of topic



## Results

Informative but succinct



In an ongoing effort to exploit the highly consanguineous nature of the Saudi population to catalog recessively acting embryonic lethal genes in humans, we have identified two families with a female-limited infertility phenotype. Using autozygosity mapping and whole exome sequencing, we map this phenotype to a single mutation in *TLE6*, a maternal effect gene that encodes a member of the subcortical maternal complex in mammalian oocytes. Consistent with the published phenotype of mouse *Tle6* mutants, embryos from female patients who are homozygous for the *TLE6* mutation fail to undergo early cleavage, with resulting sterility. The human mutation abrogates *TLE6* phosphorylation, a step that is reported to be critical for the PKA-mediated progression of oocyte meiosis II. Furthermore, the *TLE6* mutation impairs its binding to components of the subcortical maternal complex.

Clearly indicates novelty and advance



## Conclusion

In this first report of a human defect in a member of the subcortical maternal subcritical maternal complex, we show that the *TLE6* mutation is gender-specific and leads to the earliest known human embryonic lethality phenotype.

# Writing a good cover letter

This is a second chance you've got if editors don't like your title or abstract, so value it!

- Similar principles to the abstract
- BUT don't just paste the abstract
  - The editor may not be expert in your specific area
- Explain more about the motivation for the study
- Explain why readers will be interested
- Make it **really easy** to tell how your findings provide an advance
- Give key references in support (**this is a support for interest level**)

# An example of an unhelpful cover letter

Dear Editor-in-Chief,

I have attached our interesting manuscript entitled “A Statistical Method for the Publication of Manuscripts in the Best Journals” by Smith et. Al.

We would like to have the manuscript considered for publication in the journal *Genome Research*.

Please let me know of your decision at your earliest convenience.

Sincerely,

Tom Smith , PhD.

BMC Genome  
Biology

Nature  
Communication

PLoS Genetics

# What your cover letter *should* include

1. An introduction stating the title of the manuscript and the journal to which you are submitting

Dear Editor,

I am pleased to submit an original research article entitled “A novel family of microRNAs has roles in stem cell differentiation” by Tom Smith and Sally Science for consideration for publication in *Genome Biology*. We previously discovered a role for one of these novel microRNAs in cancer (citation), and this manuscript builds on the prior study.

CORRECT Journal name



# What your cover letter *should* include

2. The reason your study is important and relevant to the journal's readership
3. The question your research answers

novelty

Understudied?

"This family acts through a **previously unrecognised** mechanism"

"We **show for the first time** that these microRNAs regulate early stem cell differentiation *in vitro* and *in vivo*"

Advance

"Recent studies on this topic have been published in Nature, suggesting that this is an area of **broad interest** (see references 1-3)"

"These findings **should be of interest to anyone working on** noncoding RNAs or early stem cell differentiation"

Interest levels

High impact articles this year?

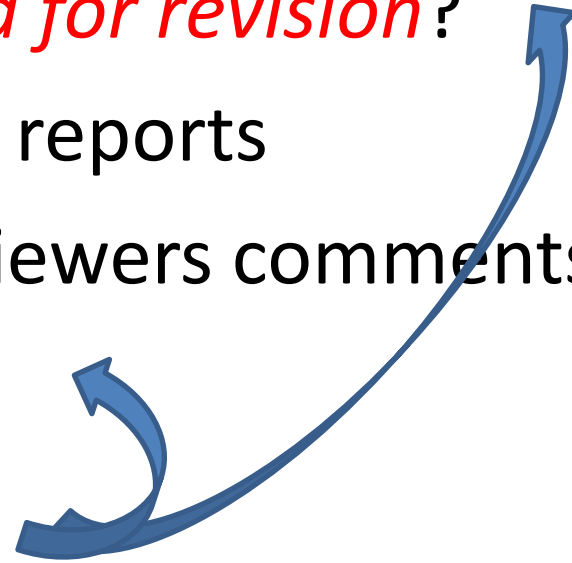
4. Your major experimental results and overall findings
5. The most important conclusions that can be drawn from your research

# Today we will cover...

- How to get published with Genome Biology
  - Who are we (Genome Biology)
  - Before submitting your paper (what editors want)
  - Responding to editors and reviewers
  - Dealing with rejection
  - Tips to summarize

# Responding to reviewers and editors

- Different types of decision, is it a *closed door rejection*, what is *asked for revision*?
- Choices after receiving reports
- How to respond to reviewers comments
- Dealing with rejection
- Appealing a decision



# Peer review is not a democracy

Reviewers often disagree with each other

Editors may overrule reviewers

Editors, not the reviewers, decide ultimately what is published



# Possible decisions after peer review



## Accepted

- ✓ All main aspects of the manuscript been assessed.
- ✓ The study has been judged to be sound.
- ✓ Study meets the required threshold for the journal



## Revisions

- ❖ Further experiments needed (e.g. more controls)
- ❖ Discuss limitations more clearly.
- ❖ Ensure data supports conclusions.



## Rejected

- Extensive revisions required
- Methods or controls not appropriate
- Lack of ethical approval or missing data.
- Inappropriate analysis of data
- Data do not support conclusions
- No novelty
- Misconduct, e.g. Plagiarism
- Unsuitable for journal scope or threshold.

# Rejection – reasons why

Separating ‘scientific soundness’ from ‘interest levels’

## Scientific soundness

Results are not sound

Interpretation is  
fundamentally flawed

Ethical concerns



Manuscript cannot be  
published (in current form)

## Interest levels

Not in scope for this journal

Not a big enough advance

Not of interest to this  
journal’s readership



Manuscript suitable for a  
different journal



**Transfer offered**

# Reading referee reports and editorial decision letters – any questions?

- Can't access one or more report
- Report mentions additional comments, but you can't see them
- Reviewer's comments are unclear
- You don't agree with the revision requirements
- Timeframe for revisions isn't feasible

**Send a query to the journal as soon as possible**

Doesn't mean it has  
to be rebuttal

# Cover letter

- Be clear it's a revision
- Say who the handling editor was
- State the previous manuscript ID number
- List what you've included
- Confidential comments – check where to put them



# Resubmission after revisions

- Cover letter
- Point-by-point response
- Manuscript with tracked or highlighted changes

compression and interfacial contact resistance of components can be measured ex situ of the cell using the apparatus shown in Figure 3. This apparatus has been used to measure the contact resistances of gas diffusion electrodes for PEM fuel cells. In situ contact resistances can be measured using electrochemical impedance spectroscopy [?? True?]. Ultimately, the lowest cell compression that maximizes cell performance will be chosen. As the air cathode design evolves, periodic checks will be made to ensure that correct cell compression is being used.

Once the cell sealing and compression have been established, the determination of the cell operating parameters will begin. Based on PEM fuel cell experience, a single channel, multi-pass flow field with channels 1 mm deep and 1 mm wide, and a land width of 1 mm should still be adequate for initial work in this area. Using the above this flow field, the effects of air pressure and flow on cell performance will be determined. The air pressure and flow requirements will be needed to optimize the flow field design described below. Initial tests in the bipolar plate cell will use UHP oxygen to establish measure the the performance in performance difference going from between dead-ended operation in the Swagelok cells to and flow operation in the bipolar plate cell. Following this, the bipolar plate will be operated on air to establish the performance in loss from going from using air over pure oxygen to air.

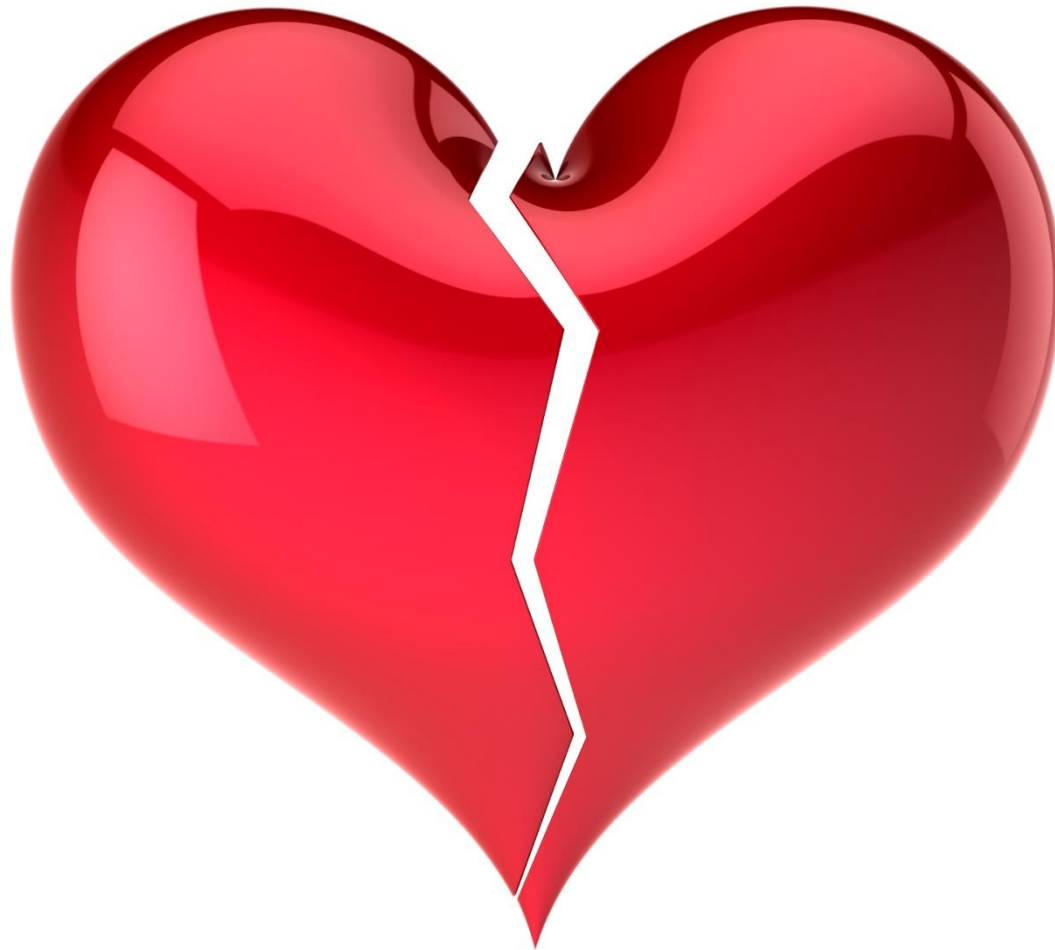
Following establishment of basic operating parameters for the cell, flow field optimization can begin. Flow field optimization will be accomplished using machined plates to minimize cost and time. There are several design parameters that need to be require optimized optimization for a given flow field. The hydraulic radius, which is determined by the channel depth and geometry, must be sized correctly to provide adequate air flow for peak power. The channel depth and geometry are limited by the choice of material for the bipolar plate material, the plate material thickness, and the potential possible high-volume manufacturing methods. The land width, which is the area of the flow field in contact with the cathode electrode, must be large enough to minimize electrostatic contact resistance. In order to maximize the cell power and energy densities, the channel depth and material thickness must be minimized. Current PEM fuel cell flow field channels are 300 µm deep and the plate material thickness is 100 µm, giving a total plate thickness of 400 µm [personal communication, D. Wilkosz]. This strongly suggests that we will be able to meet our target goal of < 600 µm. Furthermore, as the plate material thickness decreases below 600 µm, the project requirement of 10x increase in current density is relaxed. Also, any thickness < 600 µm will necessitate a smaller increase in the current density to achieve the target energy and power densities.

The baseline cathode design used in during establishing the optimum optimization of cell compression and operating parameters will be the best available design to date we have developed at this point in the project from the cathode development side of this project. The cathode design will then be held constant during these bipolar plate experiments. As the concurrent cathode research provides design-improved designs in the later stages of this

# Today we will cover...

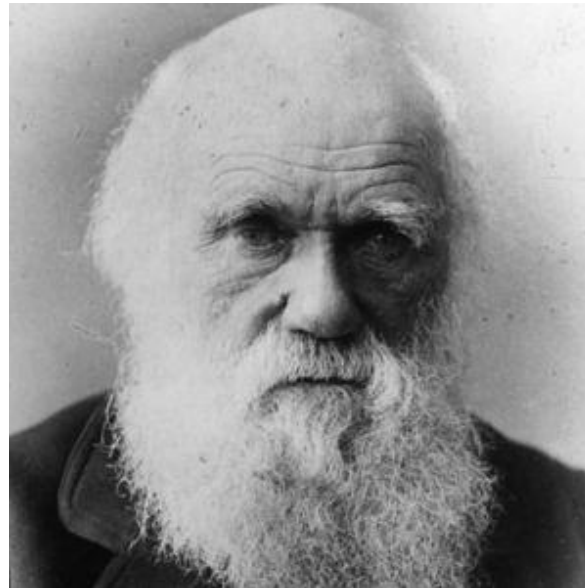
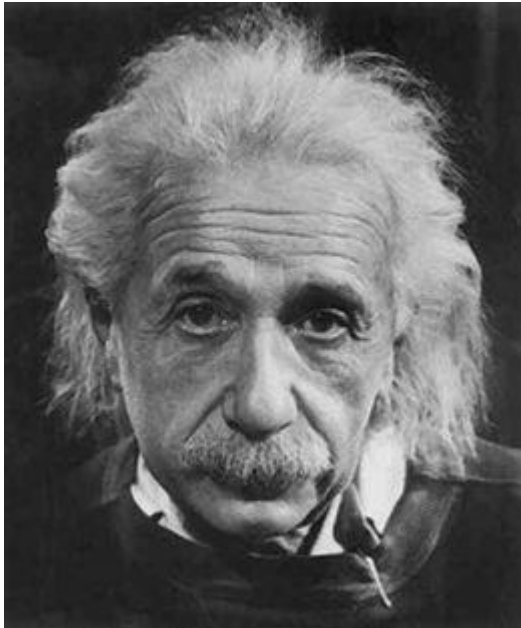
- How to get published with Genome Biology
  - Who are we (Genome Biology)
  - Before submitting your paper (what editors want)
  - Responding to editors and reviewers
  - **Dealing with rejection**
  - Tips to summarize

# Dealing with rejection



# You're not alone!

- High-impact journals have rejection rates of 90-95%
- Varies by field
- Everyone has been rejected at some point, usually often



# Reacting to rejection

- Sleep on it!
- Consider all your options
- Consult your co-authors
- Ask for clarifications if needed
- Use comments and criticisms to improve your paper

# Options after rejection

- Revise your manuscript
- Choose another journal
- Submit a rebuttal
- Consider a transfer

# Transfers

- For papers rejected because of interest level or scope
- Editor suggests a transfer to a suitable journal
- Usually within the same publishing company
- Usually to a lower impact journal
- Before peer review
- After peer review (reports are passed on too)

## **Benefits of transfers**

- Saves time finding another journal
- You may get an **offer of guaranteed peer review**
- Continuity in the peer review process

# SUMMARY

- Think about publication from the start
- Be clear about what your main conclusions are
- Spend time on a good title, abstract and cover letter
- Respond thoroughly and factually to referee reports
- **Don't be afraid to appeal or contact editors**
- If you are rejected, sleep on it!





中国联通 10:46 AM 98%

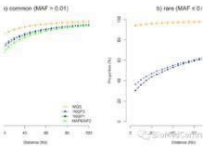
中国联通 10:46 AM 98%


中国联通 10:47 AM 98%

< Back

“手性”  
Genome Biology 一周文献  
导读|2017年5月22日  
20 2017年5月22日 (原创) 

放研  
2017BMC Ecology图片竞  
赛, 投稿倒计时两周!  
20 2017年5月18日 

蝙  
GWAS精细定位——杨剑教  
授点评  
20 2017年5月16日 (原创) 

底  
囊义  
施普林格·自然发布可以改  
变世界的180篇年度杰出论  
文  
20 2017年5月16日 

外拔  
Genome Biology 一周文献  
导读|2017年5月15日  
2017年5月15日 (原创) 



# Thank you

- Visit our website  
[www.genomebiology.com](http://www.genomebiology.com)
- **I'm happy to take questions !**
  
- **My contact info**
- **SPRINGER NATURE** | Room 10-11,  
42<sup>nd</sup> Floor, The Center | No. 989  
Changle Road
- Xuhui District | **Shanghai** | China  
200031
- T: +86 (0)21 2422 5102
- C:+86 1333 1981 036