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Manuscript overview			
Manuscript number	Submission date	Decision date	
GUIDEDOA-21-0001	06 January 2021	04 February 2021	
Title	Manuscript Title is here	Corresponding author	Corresponding author name is here
Preprint information	Link to preprint if available	Peer review type	Single- or double-blind peer review
Editorial Assessment Team	<p><b>Primary editor:</b> Rita Strack, <b>Home Journal:</b> <i>Nature Methods</i></p> <p><b>Editorial team members:</b>            Ahne Myklatur, <i>Nature Communications</i>            Anam Akhtar, <i>Communications Biology</i></p>		
About your primary editor	<p>Rita Strack obtained her Ph.D. in Biochemistry and Molecular Biology from the University of Chicago. While there, she worked with Benjamin Glick and Robert Keenan to engineer improved variants of the red fluorescent protein DsRed, and also studied the chemical mechanism of chromophore formation in DsRed. She continued her research as a postdoctoral fellow in Samie Jaffrey's laboratory at Weill Cornell Medical College, where she developed fluorescent reporters for live-cell imaging of RNA such as Spinach2. She handles imaging, microscopy and probes, along with protein and RNA biochemistry content for the journal. Rita joined Nature Methods in November 2014.</p>		

**Manuscript overview.** Key information about the manuscript and the editorial team who have assessed it.

Manuscript assessment and recommendation	
<b>Editor's summary of the manuscript</b>	The editor provides a high-level overview of the manuscript, including the most important results and the editor's assessment of the manuscript's potential impact to the field.
<b>Editorial assessment overview</b>	
<i>Nature Methods</i>	<p><b>Editors' assessment of suitability for Journal 1</b></p> <p>Additional details of this assessment, including the level of revisions that would be necessary to meet this journal's requirements.</p>
<i>Nature Communications</i>	<p><b>Editors' assessment of suitability for Journal 2</b></p> <p>Additional details of this assessment, including the level of revisions that would be necessary to meet this journal's requirements.</p>
<i>Communications Biology</i>	<p><b>Editors' assessment of suitability for Journal 3</b></p> <p>Additional details of this assessment, including the level of revisions that would be necessary to meet this journal's requirements.</p>
<b>Editor's recommendation</b>	<p><b>Option 1: Revise and submit to Nature Methods</b> The editorial team's rationale for this recommendation and an outline of the required revisions. For example, some of the reviewers' requested experiments may be required for publication in this journal.</p> <p><b>Option 2: Revise and submit to Nature Communications</b> In some cases, the editors may provide a secondary option that will differ from the first in terms of the revisions necessary to meet the journal's requirements for publication.</p>
<b>Next steps</b>	<p>If you would like to follow our recommendation, when you are ready please use <a href="#">this link</a> to submit your revised files. Please see the decision letter email for details. If you need assistance with our manuscript tracking system, please contact Adam Lipkin, our Nature Portfolio Guided OA support specialist at <a href="mailto:guidedOA@nature.com">guidedOA@nature.com</a>.</p> <p><b>**Please note that the submission link above is for your individual author homepage. We recommend that you do not share this link with others**</b></p>

**Manuscript assessment and recommendation.** Assessment of the suitability for the three journals that considered the manuscript and the editorial recommendation along with next steps.

## About the editorial process

By selecting the **Nature Portfolio Guided Open Access option**, your manuscript was assessed for suitability in three of our titles that provide venues for publication of high-quality work across the spectrum of methods development research: *Nature Methods*, *Nature Communications*, and *Communications Biology*. For more information about Guided Open Access, please see [here](#).



### Collaborative editorial assessment

Your editorial team discussed the manuscript to determine its suitability for the Nature Portfolio Guided OA pilot. Our assessment of your manuscript takes into account several factors, including whether the work meets the **technical standard** of the Nature Portfolio and whether the findings are of **immediate significance** to the readership of at least one of the participating journals in the Nature Portfolio Guided Open Access methods cluster.

### Peer review

Experts were asked to evaluate the following aspects of your manuscript:



**Novelty** in comparison to prior publications;

**Likely audience** of researchers in terms of broad fields of study and size;

**Potential impact** of the study on the immediate or wider research field;

**Evidence** for the claims and whether additional experiments or analyses could feasibly strengthen the evidence;

**Methodological detail** and whether the manuscript is reproducible as written;

**Appropriateness of the literature review.**



### Editorial evaluation of reviews

Your editorial team discussed the potential suitability of your manuscript for each of the participating journals. They then discussed the revisions necessary in order for the work to be published, keeping each journal's specific editorial criteria in mind.

*Journals in the Nature portfolio will support authors wishing to transfer their reviews and (where reviewers agree) the reviewers' identities to journals outside of Springer Nature. For any questions about review portability, please contact our editorial office: [guidedoa@nature.com](mailto:guidedoa@nature.com)*

**About the editorial process.**  
Explanation of how the editorial team works together in Guided Open Access.

Annotated reviewer comments		
<b>Reviewer #1</b>		
<i>Report received:</i> Date that report was submitted by the reviewer		
<b>Reviewer #1</b>	If the reviewer has waived anonymity, their name and affiliation are shown here.	
<b>Reviewer #1 expertise</b> <i>Summarised by the editor</i>	Brief description of the reviewer's expertise that is relevant to the manuscript.	
<b>Editor's comments about this review</b>	A high-level overview of the reviewer report is provided by the editor.	
Reviewer #1 comments		
<b>Overview</b>	General comments and feedback from the reviewer appear here.	
Specific comments		
#	Reviewer comment	Editorial comment
1	Each reviewer comment is included in its own row so that the editor can annotate the most important points.	The editor may comment on the importance of the reviewer request and/or provide guidance on how best to address the reviewer's comment.

**Reviewer comments.** The editorial team carefully evaluates each reviewer's report and provides specific guidance on addressing their comments and concerns.

## Open Research evaluation

### Data Availability

<b>Data Availability Statement (DAS)</b>	Please mention all the datasets used in the study along with appropriately accessible links in the manuscript under the 'Data availability' section. See <a href="#">our policy page on reporting standards</a> for details.
<b>Mandatory data deposition</b>	The ATAC-seq data reported in the study must be made available via an <a href="#">approved repository</a> .
<b>Recommended data deposition</b>	<p>We also strongly urge you to deposit the raw microscopy images associated with the study. If you need help depositing and curating your research data (including raw and processed data, text, video, audio and images) you should consider:</p> <ul style="list-style-type: none"> <li>• Contacting Springer Nature's Research Data <a href="#">Helpdesk</a> for advice;</li> <li>• finding a suitable <a href="#">data repository</a> for your data;</li> <li>• Or uploading your data to Springer Nature's <a href="#">Research Data Support</a> service.</li> </ul> <p>Please note there <a href="#">are fees</a> for using Springer Nature's Research Data Support service.</p>

### Code Availability

<b>Code Availability Statement</b>	We strongly recommend that you deposit the custom code developed for this study in a public repository (such as github, for example). Please provide appropriate links and access codes in the manuscript under the heading 'Code Availability' as well as in the reporting summary.
<b>Code Citation</b>	In addition to making the custom code available, we ask that you ensure that the version of the code/software described in the paper is deposited in a DOI-minting repository (eg, Zenodo) and that this DOI is also cited in the main Reference list.

### Research ethics

<b>Competing interests</b>	A competing interests statement is missing from your manuscript. Please state whether the authors have any competing interests, including but not limited to financial conflicts of interest. See <a href="#">our policy page on competing interests</a> for details.
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**Open research evaluation.**  
Editors prepare a personalised open research report tailored to each unique manuscript.

<b>Research with live animals.</b>	Please include a statement affirming that you have complied with all relevant ethical regulations for animal testing and research. A statement explicitly confirming if the study received ethical approval, including the name of the board and institution that approved the study protocol will be required for publication. The species, strain, sex and age of animals should be included.
<b>Methods assessment and reproducibility</b>	
<b>Statistical Evaluation</b>	<p>The reviewers have commented on specific aspects of the statistical analysis that must be addressed prior to publication.</p> <p>When reporting p-values, exact values should be reported rather than significance thresholds. To improve the transparency of reporting in the study, please also include the name of the statistical test, any relevant parameters, and the estimated effect size. If applicable, please also include confidence intervals.</p>
<b>Digital image integrity</b>	The microscopy images in Figures 2 and 4 are missing visible scale bars. These should be defined within the figure caption.
<b>Methods Descriptions</b>	The protocol described for the cell staining experiment is missing sufficient detail to be reproduced. Please include information about the antibodies used and the sources of cell lines and reagents.

**This final section of the report focuses on:**

- ✓ Promoting FAIR principles (Findable, Accessible, Interoperable, and Reusable) for data and code
- ✓ Ensuring adherence to ethical standards
- ✓ Maximising reproducibility through improved reporting of methods and statistical analysis