

Preprints from a researcher's perspective



Prof Stephen Royle

@clathrin

Warwick Medical School


Who am I?

- Cell biologist
- Group leader for 14 years in UK academia
- Research group ~10 members (students, post-docs)
- Pro preprint
 - First preprint in 2014
 - Lab policy is to preprint where possible
 - Affiliate of bioRxiv
 - Director, Company of Biologists (preLights, Journals, meetings)



Preprint consumers

- Cell biology is preprint-friendly
- Paper discovery (RSS, twitter, slack): preprints > papers
- Preprint journal club
- Using methods from preprints
- Preprints are “open access” papers



Rank	Category	Papers	Share (%)
1	Neuroscience	2152	17.24
2	Microbiology	1279	10.25
3	Bioinformatics	1078	8.64
4	Cell Biology	748	5.99
5	Genomics	637	5.1
6	Ecology	626	5.01
7	Evolutionary Biology	563	4.51
8	Biochemistry	559	4.48
9	Biophysics	552	4.42
10	Cancer Biology	531	4.25

Preprint producers

- Why do we deposit preprints?
 - Fast scientific communication
 - Extension of what we have always done – talks/posters
 - DOI + scoop protection
 - Feedback
 - ECR benefit

> Martins Ratamero, E. & Royle, S.J. (2019) Calculating the maximum capacity of intracellular transport vesicles **bioRxiv**, doi: 10.1101/555813. | Link 20 Feb 2019



Now published

> Kuey, C., Larocque, G., Clarke, N.I & Royle, S.J. (2019) Unintended inhibition of protein function using GFP nanobodies in human cells **bioRxiv**, doi: 10.1101/590984. | Link 27 Mar 2019 | Published in J Cell Sci 10 Oct 2019



> Larocque, G., La-Borde, P.J., Clarke, N.I., Carter, N.J. & Royle, S.J. (2019) Tumor Protein D54 defines a new class of intracellular transport vesicle **bioRxiv**, doi: 10.1101/481754. | Link 28 Nov 2018 | Published in J Cell Biol 31 Oct 2019



> Clarke, N.I. & Royle, S.J. (2016) FerriTag: A Genetically-Encoded Inducible Tag for Correlative Light-Electron Microscopy **bioRxiv**, doi: 10.1101/095208. | Link 18 Dec 2016 | Published in Nat Commun 04 July 2018



> Nixon*, F.M., Honnor*, T.R., Starling, G.P., Beckett, A.J., Johansen, A.M., Brettschneider, J.A., Prior, I.A. & Royle, S.J. (2016) Microtubule organization within mitotic spindles revealed by serial block face scanning EM and image analysis **bioRxiv**, doi: 10.1101/087866. | Link 15 Nov 2016 | Published in J Cell Sci 15 May 2017



> Wood, L.A., Clarke, N.I., Sarkar, S. & Royle, S.J. (2016) Hot-wiring clathrin-mediated endocytosis in human cells **bioRxiv**, doi: 10.1101/061986. | Link 4 Jul 2016 | Published in J Cell Biol 26 Sep 2017



> Gutiérrez-Caballero, C., Burgess, S.G., Bayliss, R. & Royle, S.J. (2014) TACC3–ch-TOG track the growing tips of microtubules independently of clathrin and Aurora-A phosphorylation **bioRxiv**, doi: 10.1101/008359. | Link 21 Aug 2014 | Published in Biol Open 16 Jan 2015



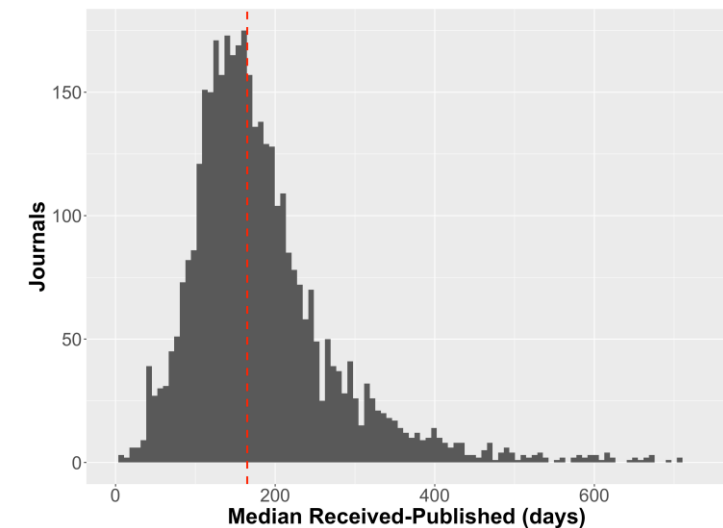
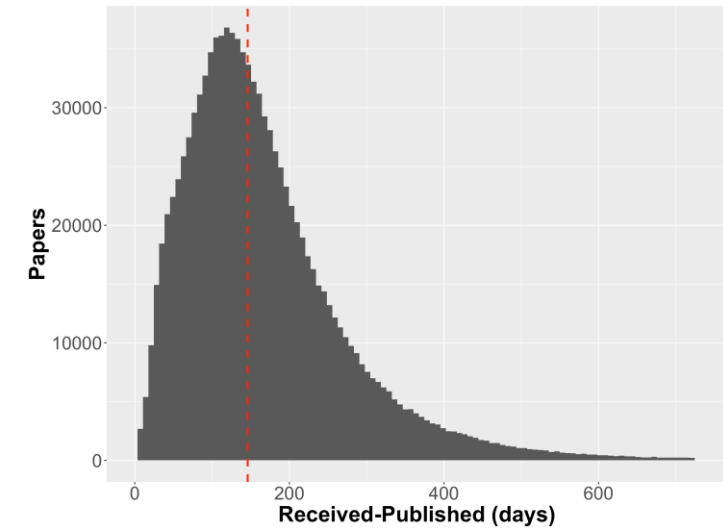
> Willox, A.K., Sahraoui, Y.M.E. & Royle, S.J. (2014) Non-specificity of Pitstop 2 in clathrin-mediated endocytosis **bioRxiv**, doi: 10.1101/002675. | Link 13 Feb 2014 | Published in Biol Open 4 Apr 2014



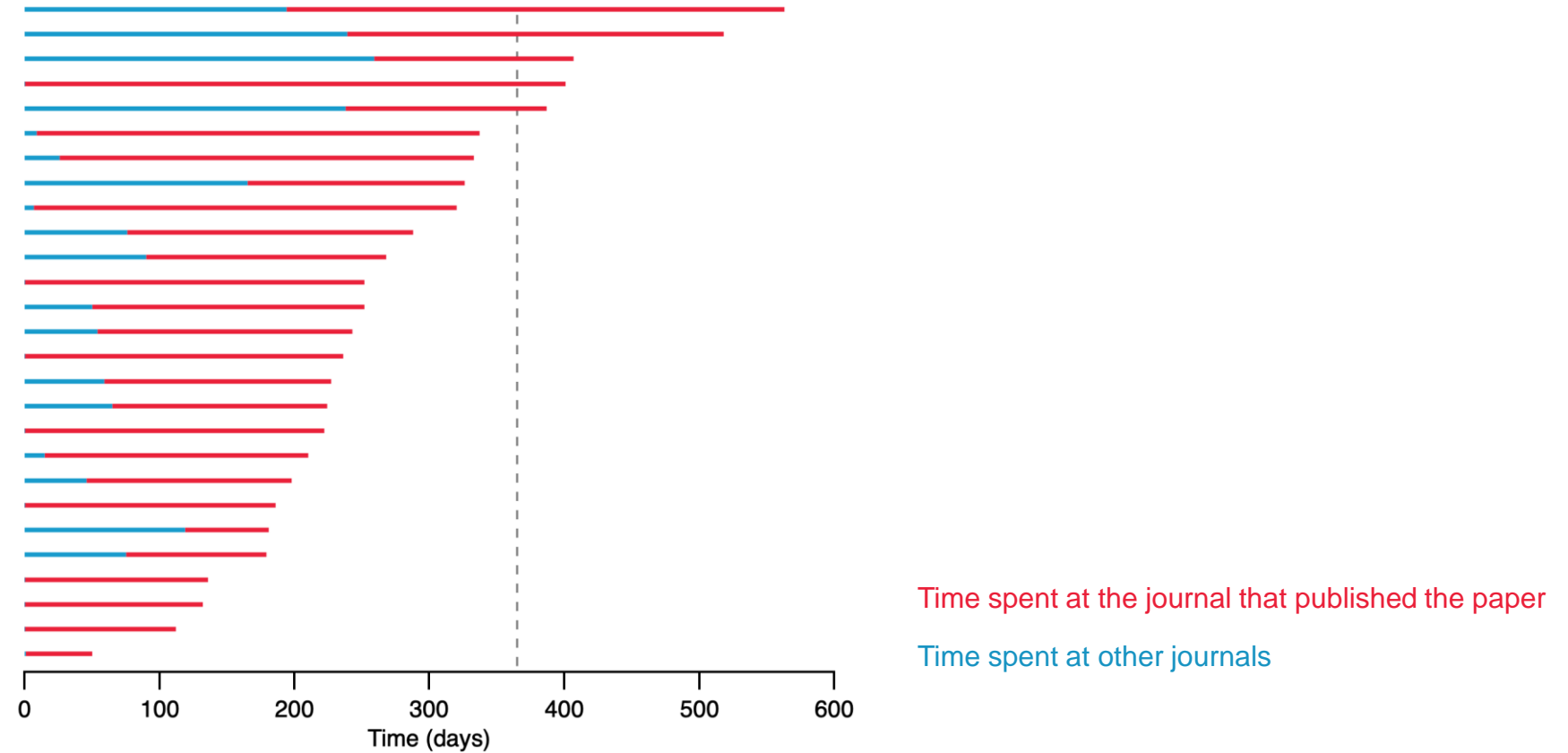
> Kaur, S., Fielding, A.B., Gassner, G., Carter, N. J. & Royle, S.J. (2014) An unmet actin requirement explains the mitotic inhibition of clathrin-mediated endocytosis **bioRxiv**, doi: 10.1101/001701. | Link 09 Jan 2014 | Published in eLife 18 Feb 2014



- All journal articles published in 2019
- 1,060,195 papers in 4,673 journals (3,847 with >9 papers)
- Median received to published time is 146 days (IQR = 94 - 216)
- Median time per journal is **165 days** (IQR = 125 - 219)
- Underestimate
 - “Reject and resubmit”
 - Does not include time spent at other journals

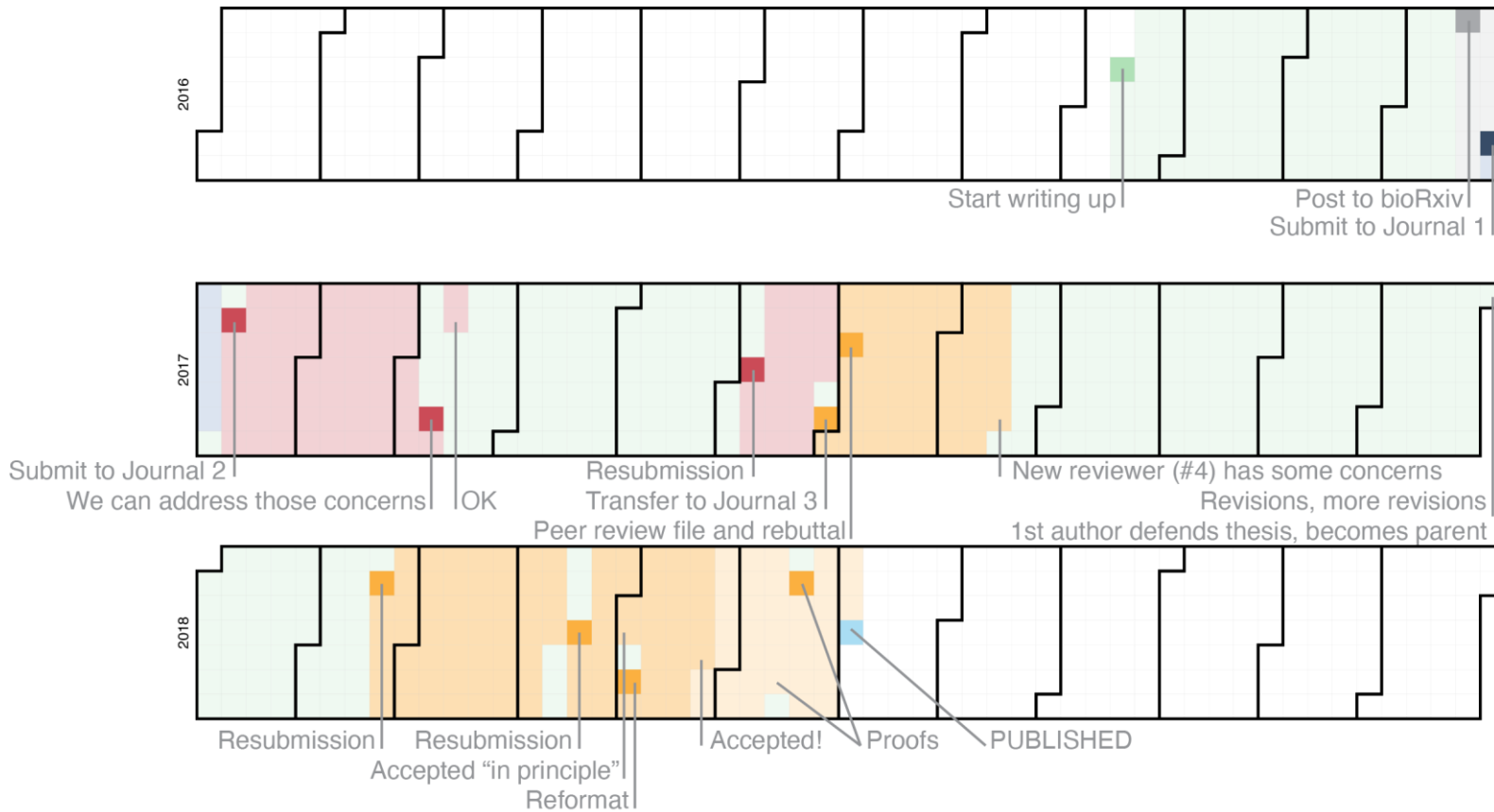


Publishing takes time...



Time from very first submission to final publication for our papers

...a long time!



The journey that one of our papers took

Preprints and careers

- Tough for an ECR on a short contract to publish a paper
- Preprints allow ECRs to show productivity
 - Fellowship and job applications
 - No more “submitted” or “in preparation” papers
- PIs similarly use preprints
 - Grant applications – allowed/encouraged by funders
 - Tenure or promotion cases

Thanks

Lab



The
Royle
LabCell
Biology

Contact



@clathrin
@roylelab
@Warwick_CMCB

Data



quantixed.org

Rekaryo

rekaryo.com