Publishing Research Data

A Researcher's Perspective

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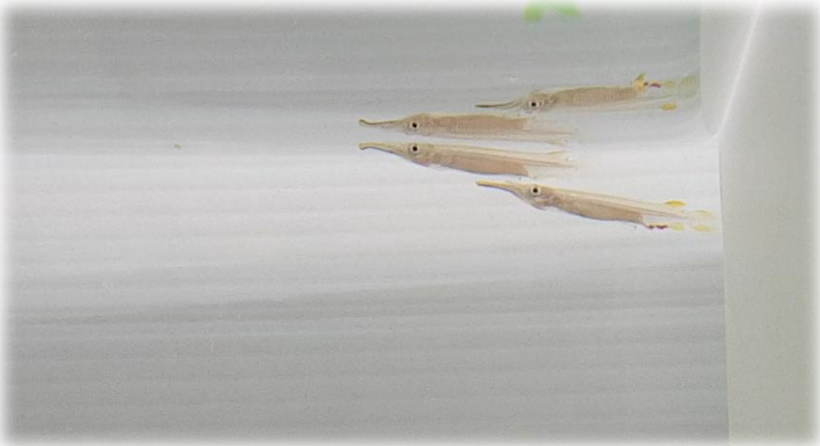
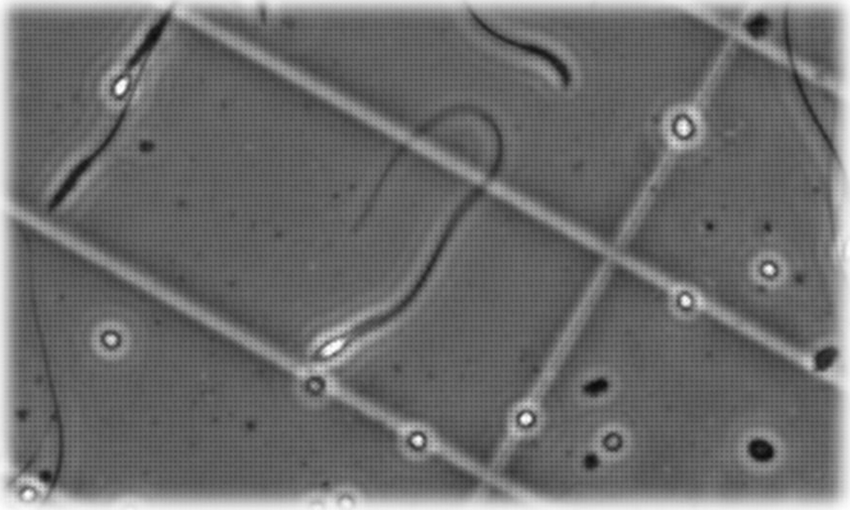




Benefits
and
Costs
of publishing research data

Benefits

of publishing research data

2014: Catching mistakes

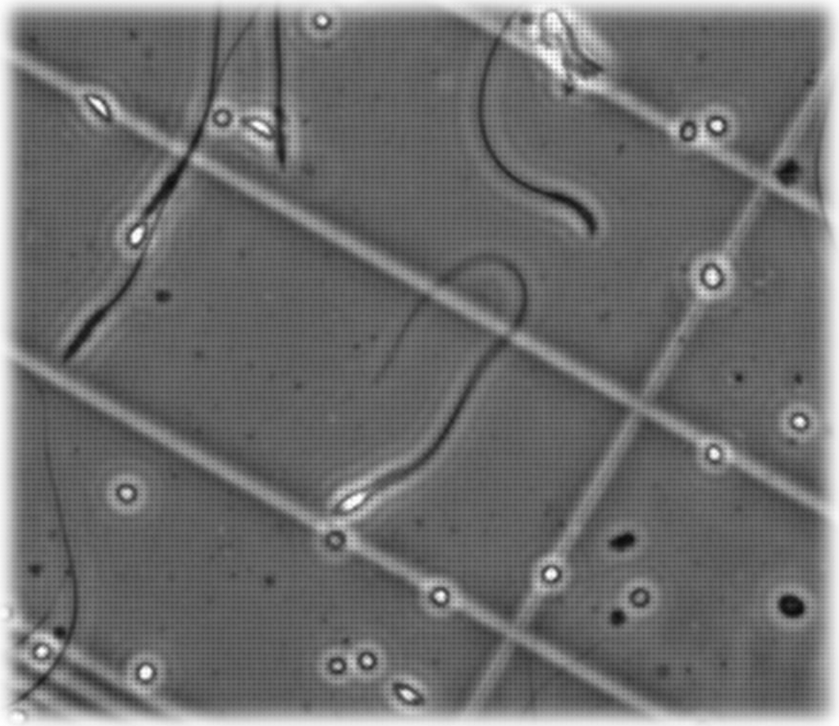
EVOLUTION
INTERNATIONAL JOURNAL OF ORGANIC EVOLUTION
doi:10.1111/evo.12199

RELATIONSHIPS BETWEEN SPERM LENGTH AND SPEED DIFFER AMONG THREE INTERNALLY AND THREE EXTERNALLY FERTILIZING SPECIES

Julia L. Simpson,[1] Stuart Humphries,[1] Jonathan P. Evans,[2] Leigh W. Simmons,[2] and John L. Fitzpatrick[2,3,4]

Table 1. Results for sperm length–single principal component (PC1) relationships from mixed model centering allowing random effect intercepts for between- and within-male analysis. HW = head width, HL = head length, HV = head volume (no HV measure for mussel data), FL = flagella length, TL = total length, HL:FL = ratio of head length to flagellum length, n_{total} = total number of males df_{bw} = degrees of freedom between-male ($df_{w/in}$ = degrees of freedom within-male), t = effect estimate from linear model. Significant correlations ($P \leq 0.05$) are presented in bold with 95% confidence intervals (95% CI) calculated for each effect size (r). [Correction added on November 13, 2013, after first online publication: Table 1 was corrected to reflect reanalysis of our data revealed, which revealed some differences in the results from sperm length-swimming speed relationships from mixed model centering analyses.].

Democratizing data and expanding science



nature ecology & evolution
ARTICLES
https://doi.org/10.1038/s41559-021-01488-y
Check for updates

Fertilization mode drives sperm length evolution across the animal tree of life

Ariel F. Kahrl ✉, Rhonda R. Snook and John L. Fitzpatrick

nature communications
Article
https://doi.org/10.1038/s41467-022-34609-7

Fertilization mode differentially impacts the evolution of vertebrate sperm components

Received: 6 May 2022
Accepted: 31 October 2022

Ariel F. Kahrl[1,2] ✉, Rhonda R. Snook[1] & John L. Fitzpatrick[1]

spermtree.org

SpermTree

A database of sperm morphology across the animal kingdom

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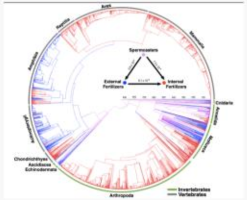
Publicly available database of:

- 5,675 descriptions of sperm morphology
- from 4,705 unique species
- from 27 animal phyla




nature ecology & evolution

Fertilization mode drives sperm length across the animal tree of life

Ariel F. Kahrl, Rhonda R. Snook and John L. Fitzpatrick

Database

Click here to access the full database and references.

Publications

Here is a list of publications that have resulted from SpermTree. Let us share yours by contacting us!

Contribute!

Want to contribute your own data? Would you like to become a curator for SpermTree? Click here for more information.

Developing collaborations

Data availability

The datasets generated and analysed during the current study are available at the OSF platform under the following identifier: https://osf.io/e34s9/.

Code availability

The R code used to analyse the data in the current study is available at the OSF platform under the following identifier: https://osf.io/e34s9.

nature ecology & evolution

ARTICLES

https://doi.org/10.1038/s41559-021-01453-9

Check for updates

Meta-analytic evidence that animals rarely avoid inbreeding

Raïssa A. de Boer[1,3], Regina Vega-Trejo[1,3], Alexander Kotschal[1,2] and John L. Fitzpatrick[1]

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Meta-analytic evidence that animals rarely avoid inbreeding

Contributors: Raïssa de Boer, Regina Vega-Trejo

Date created: 2019-02-21 10:14 AM | Last Updated: 2021-04-21 07:04 PM

Category: Project

Description: *A meta-analysis to find review-based evidence of inbreeding avoidance in animals.*

Parental care and inbreeding depression help explain patterns of inbreeding avoidance in animals

Peer-led organizations

SORTEE

Society for Open, Reliable, and Transparent Ecology and Evolutionary Biology

SORTEE

EcoEvoRxiv

Costs

of publishing research data

Costs

Time

Training

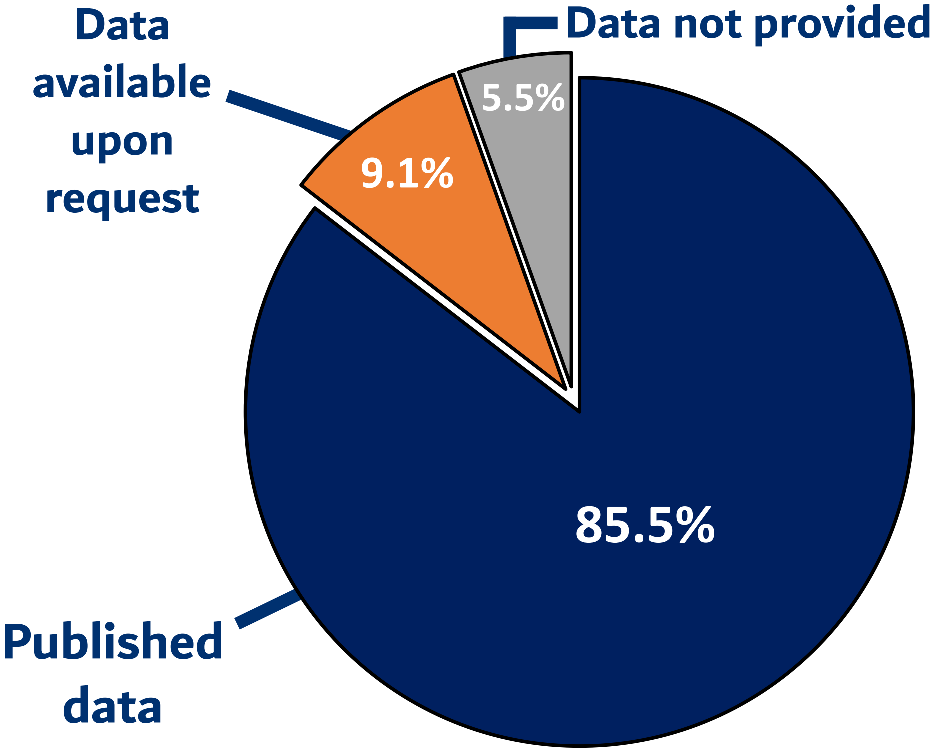
Stockholm University

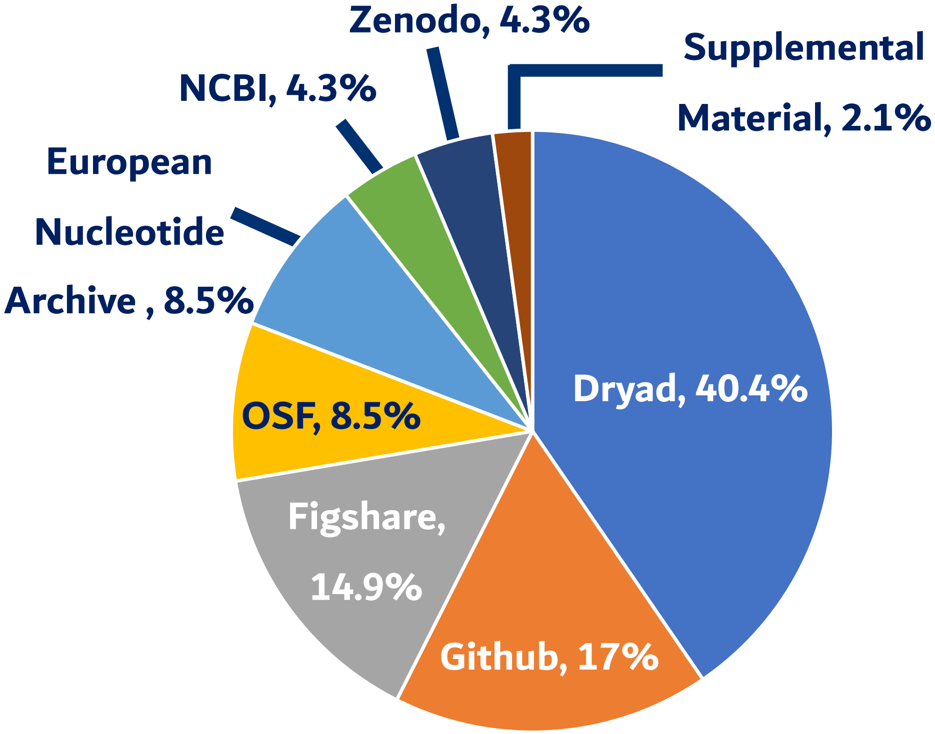
Stress/ Anxiety

Rewards?

Practices in the Department of Zoology

Survey of 55 publications with empicial data from 2022:





The emerging standard in the field

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Publishing Research Data

Thanks

A01_02_ZBG	BG	6.557	2	9	0	4	2.141	A01_02_ZBG	F10	0.038	2.953	0.014	-0.148		Z	BG	0.01286827	1.662687
A01_02_ZSG	SG	80.23	5	6	0	6	2.141	A01_02_ZSG	F09	0.024	3.101				Z	SG	0.00773944	
A01_03_WB(	BG	38.708	8	13	2	7	2.072	A01_03_WB(	F13.1	0.021	2.558	0.007	-0.172		W	BG	0.00820954	1.600860
A01_03_WS(	SG	202.857	33	30	3	6	2.072	A01_03_WS(	F14	0.014	2.73				W	SG	0.00512821	
A02_10_VBG	BG	9.259	2	10	2	21	2.531	A02_10_VBG	F19	0.036	3.156	0.022	0.07		V	BG	0.01140684	
A02_10_VSG	SG	9.142	2	17	1	18	2.531	A02_10_VSG	F20	0.014	3.086				V	SG	0.00453662	2.514394
A03_20_YBG	BG	0	0	6	0	0	2.1	A03_20_YBG	F35	0.027	2.916	0.009	0.273		Y	BG	0.00925926	
A03_20_YSG	SG	43.363	8	47	5	2	2.1	A03_20_YSG	F36	0.018	2.643				Y	SG	0.00681044	1.35956
A03_21_XBG	BG	616.999	7	6	1	11	2.153	A03_21_XBG	F49	0.032	3.635	0.013	0.288		X	BG	0.0088033	
A03_21_XSG	SG	408.993	16	3	1	6	2.153	A03_21_XSG	F50	0.019	3.347				X	SG	0.00567673	1.550771
A04_28_XBG	BG	96.912	17	21	2	3	2.213	A04_28_XBG	F01	0.041	2.956	0.033	0.102		X	BG	0.01387009	4.948156
A04_28_XSG	SG	155.189	1	6	0	2	2.213	A04_28_XSG	F02	0.008	2.854				X	SG	0.00280308	
A04_29_ZBG	BG	2.536	1	23	0	9	2.369	A04_29_ZBG	F10	0.041	2.953	0.031	0.009		Z	BG	0.01388419	4.087504
A04_29_ZSG	SG	24.909	5	20	1	5	2.369	A04_29_ZSG	F9.1	0.01	2.944				Z	SG	0.00339674	
A04_30_WB(	BG	94.647	13	6	0	9	2.142	A04_30_WB(	F11	0.032	2.933	0.021	0.078		W	BG	0.01091033	
A04_30_WS(	SG	28.363	2	10	1	14	2.142	A04_30_WS(	F12	0.011	2.855				W	SG	0.00385289	2.831726
A05_37_WB(	BG	165.696	12	15	0	18	2.149	A05_37_WB(	F56	0.032	2.865	0.018	-0.057		W	BG	0.01116928	2.331189
A05_37_WS(	SG	43.291	14	12	1	5	2.149	A05_37_WS(	F55	0.014	2.922				W	SG	0.00479124	
A05_38_UBG	BG	117.485	6	0	1	4	2.244	A05_38_UBG	F61	0.032	2.495	0.023	-0.172		U	BG	0.01282565	
A05_38_USG	SG	9.71	3	17	4	3	2.244	A05_38_USG	F62	0.009	2.667				U	SG	0.00337458	3.8006
A05_39_YBG	BG	283.581	17	3	2	8	2.177	A05_39_YBG	F31	0.033	3.111	0.02	0.039		Y	BG	0.01060752	2.506638
A05_39_YSG	SG	369.718	5	7	2	2	2.177	A05_39_YSG	F32	0.013	3.072				Y	SG	0.00423177	
A06_46_UBG	BG	281.864	13	3	0	4	2.074	A06_46_UBG	F27	0.041	2.656	0.025	0.356		U	BG	0.01543675	
A06_46_USG	SG	10.644	1	2	0	0	2.074	A06_46_USG	F28	0.016	2.3				U	SG	0.00695652	2.219032
A06_47_VBG	BG	82.782	19	18	0	2	2.11	A06_47_VBG	F72	0.03	2.524	0.018	0.041		V	BG	0.0118859	2.459389
A06_47_VSG	SG	141.407	15	7	1	6	2.11	A06_47_VSG	F71	0.012	2.483				V	SG	0.00483286	
A07_56_ZBG	BG	12.846	4	42	1	2	2.273	A07_56_ZBG	F07	0.031	3.404	0.015	0.061		Z	BG	0.00910693	
A07_56_ZSG	SG	3.904	1	24	3	5	2.273	A07_56_ZSG	F08	0.016	3.343				Z	SG	0.00478612	1.902779
A07_57_UBG	BG	159.178	10	32	1	6	2.309	A07_57_UBG	F86	0.05	2.773	0.034	0.129		U	BG	0.01803101	2.979624
A07_57_USG	SG	15.564	5	52	2	0	2.309	A07_57_USG	F85	0.016	2.644				U	SG	0.00605144	
A08_64_YBG	BG	14.764	4	12	0	2	2.426	A08_64_YBG	F41	0.038	3.188	0.021	-0.103		Y	BG	0.0119197	2.307513
A08_64_YSG	SG	48.916	9	2	0	2	2.426	A08_64_YSG	F42	0.017	3.291				Y	SG	0.0051656	
A08_65_WB(	BG	122.954	18	36	0	5	2.125	A08_65_WB(	F07.1	0.026	2.603	0.015	0.145		W	BG	0.00998847	
A08_65_WS(	SG	24.925	7	14	2	9	2.125	A08_65_WS(	F93	0.011	2.458				W	SG	0.00447518	2.23197
A08_66_ZBG	BG	154.972	14	31	3	6	2.283	A08_66_ZBG	F53	0.054	2.761	0.039	-0.115		Z	BG	0.01955813	
A08_66_ZSG	SG	6.589	2	31	2	1	2.283	A08_66_ZSG	F54	0.015	2.876				Z	SG	0.00521558	3.749945
A09_73_YBG	BG	12.68	4	6	0	12	2.337	A09_73_YBG	F56	0.033	2.865	0.02	-0.057		Y	BG	0.01151832	
A09_73_YSG	SG	53.972	13	7	0	10	2.337	A09_73_YSG	F55	0.013	2.922				Y	SG	0.00444901	2.588964
A10_82_VBG	BG	266.901	11	11	0	15	2.264	A10_82_VBG	F92	0.031	3.091	0.014	-0.102		V	BG	0.01002912	1.883704
A10_82_VSG	SG	471.253	7	33	1	17	2.264	A10_82_VSG	F91	0.017	3.193				V	SG	0.00532415	
A10_83_XBG	BG	49.8	10	22	0	32	2.135	A10_83_XBG	F88	0.037	2.436	0.021	-0.068		X	BG	0.01518883	
A10_83_XSG	SG	844.059	7	3	5	10	2.135	A10_83_XSG	F87	0.016	2.504				X	SG	0.00638978	2.377052
A10_84_YBG	BG	31.765	4	5	0	4	2.18	A10_84_YBG	F86	0.046	2.773	0.028	0.129		Y	BG	0.01658853	2.436671

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