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(NESCent)

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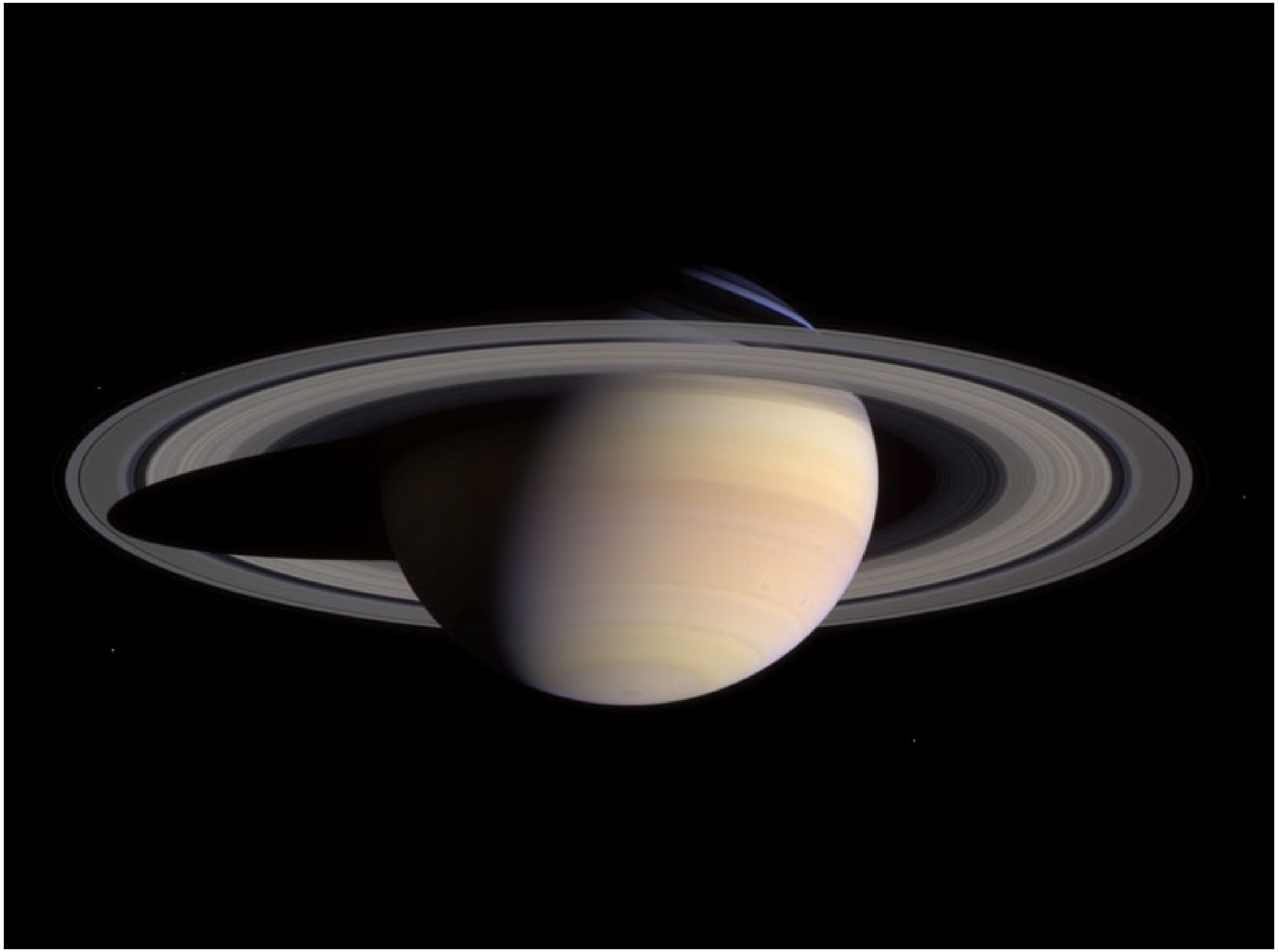
s m a i s m r m i l m e p o e t a l e u m i b u n e n u g t t a u i r a s



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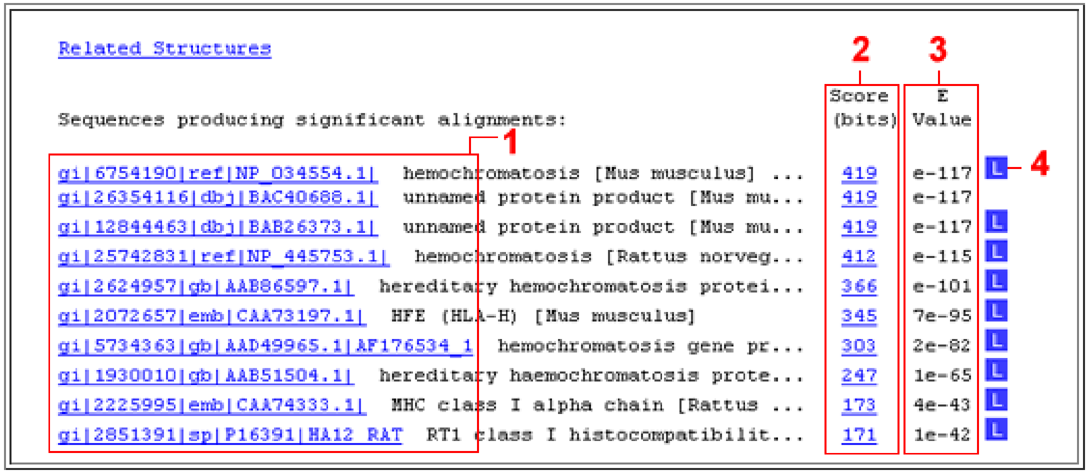

Related Structures

Sequences producing significant alignments:

		Score (bits)	E Value
gi|6754190|ref|NP_034554.1|	hemochromatosis [Mus musculus] ...	419	e-117
gi|26354116|dbj|BAC40688.1|	unnamed protein product [Mus mu...	419	e-117
gi|12844463|dbj|BAB26373.1|	unnamed protein product [Mus mu...	419	e-117
gi|25742831|ref|NP_445753.1|	hemochromatosis [Rattus norveg...	412	e-115
gi|2624957|gb|AAB86597.1|	hereditary hemochromatosis protei...	366	e-101
gi|2072657|emb|CAA73197.1|	HFE (HLA-H) [Mus musculus]	345	7e-95
gi|5734363|gb|AAD49965.1|AF176534_1	hemochromatosis gene pr...	303	2e-82
gi|1930010|gb|AAB51504.1|	hereditary haemochromatosis prote...	247	1e-65
gi|2225995|emb|CAA74333.1|	MHC class I alpha chain [Rattus ...	173	4e-43
gi|2851391|sp|P16391|HA12_RAT	RT1 class I histocompatibilit...	171	1e-42

1. Title: **Gapped BLAST and PSI-BLAST: a new generation of protein database search programs**
Author(s): Altschul, SF; Madden, TL; Schaffer, AA; et al.
Source: NUCLEIC ACIDS RESEARCH Volume: **25** Issue: **17** Pages: **3389-3402** DOI: **10.1093/nar/25.17.3389** Published: **SEP 1 1997**
Times Cited: **31,470** (from Web of Science)

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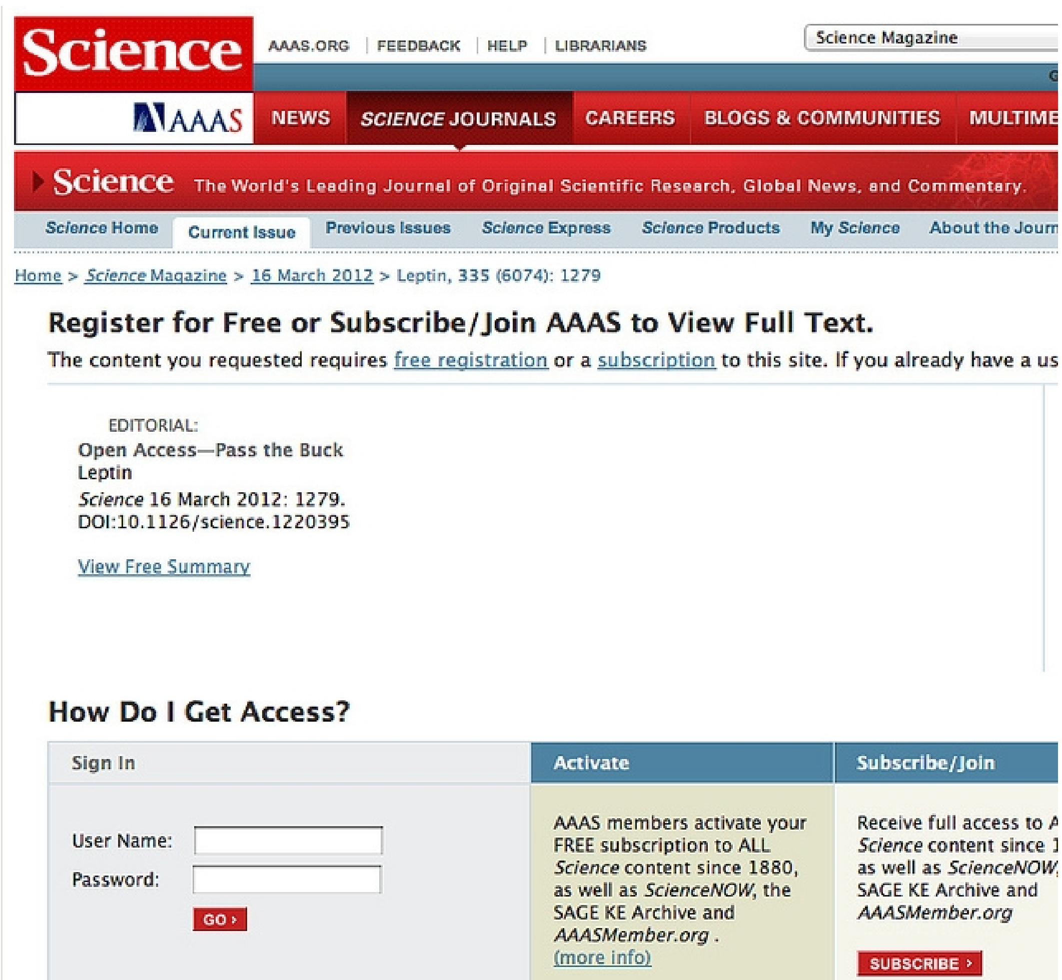
~~fieldwork~~ ~~labwork~~

new methods

meta-analysis

data synthesis



http://www.flickr.com/photos/dullhunk/6840653944/sizes/z/in/photostream/

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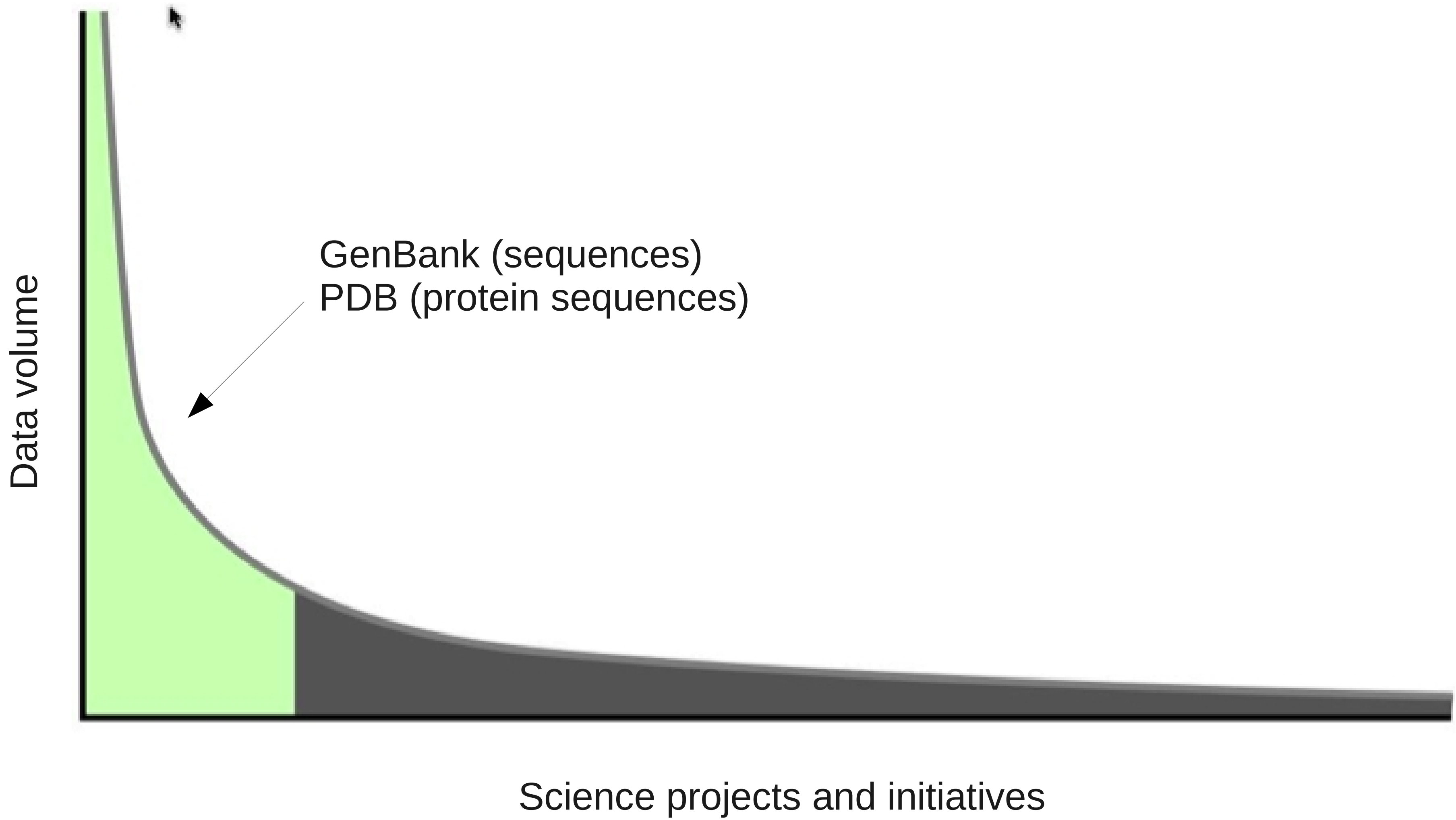
Long tail of scientific data



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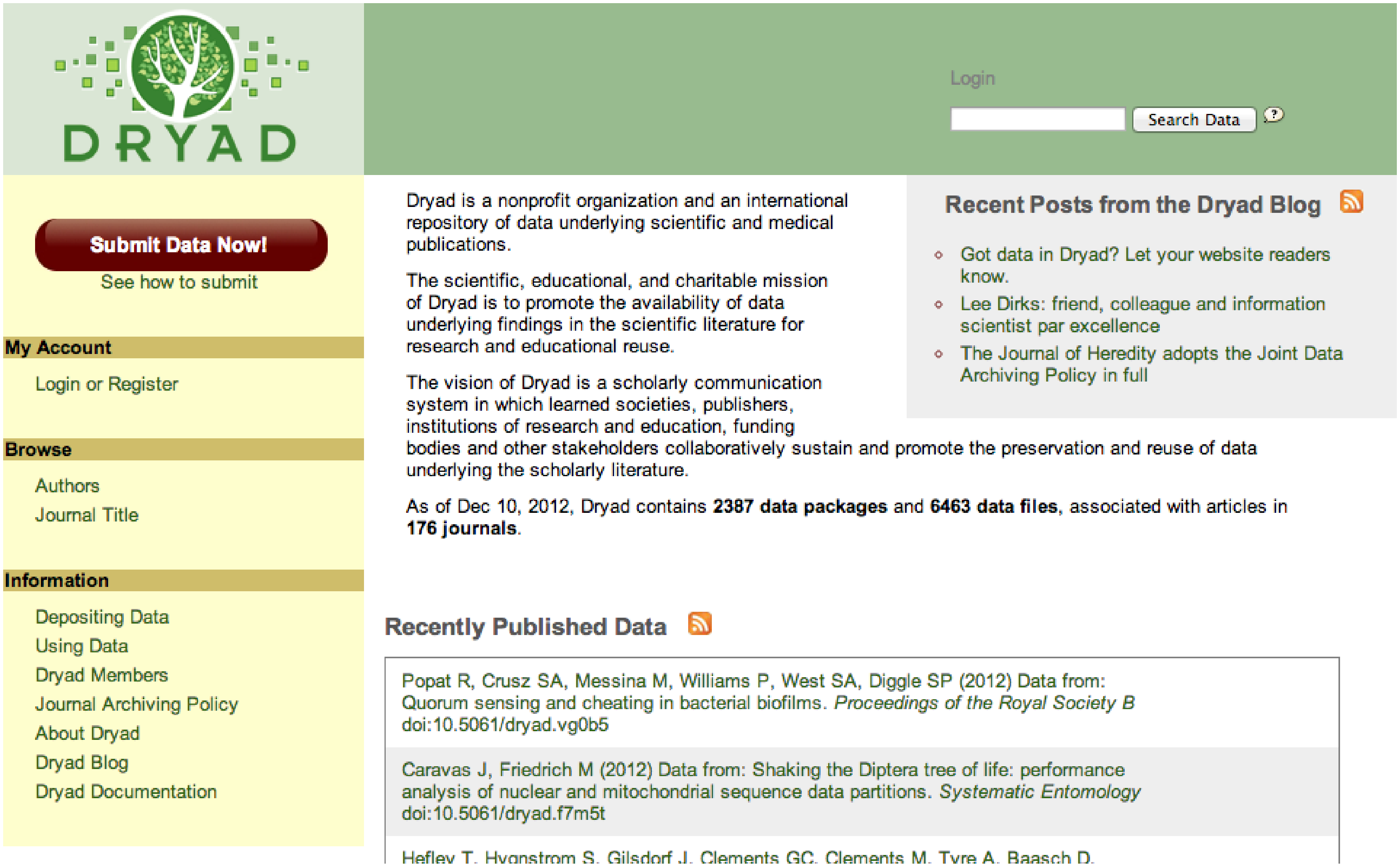

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Popat R, Crusz SA, Messina M, Williams P, West SA, Diggle SP (2012) Data from: Quorum sensing and cheating in bacterial biofilms. *Proceedings of the Royal Society B* doi:10.5061/dryad.vg0b5

Caravas J, Friedrich M (2012) Data from: Shaking the Diptera tree of life: performance analysis of nuclear and mitochondrial sequence data partitions. *Systematic Entomology* doi:10.5061/dryad.f7m5t

Hefley T, Hygnstrom S, Gilsdorf J, Clements GC, Clements M, Tyre A, Baasch D,

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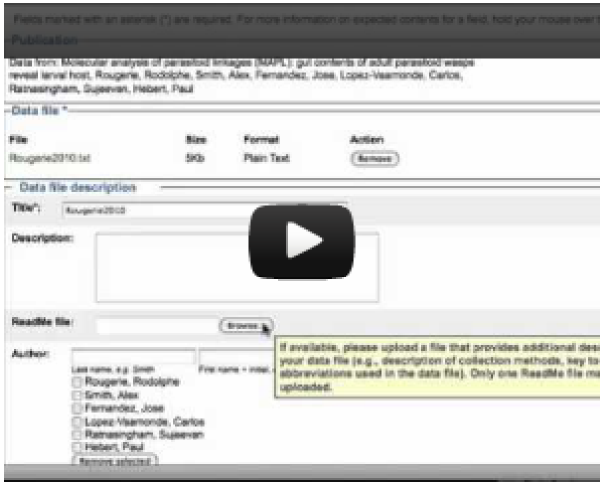

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Additionally, please cite the Dryad data package:

Zanne AE, Lopez-Gonzalez G, Coomes DA, Ilic J, Jansen S, Lewis SL, Miller RB, Swenson NG, Wiemann MC, Chave J (2009) Data from: Towards a worldwide wood economics spectrum. Dryad Digital Repository. doi:10.5061/dryad.234

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Dryad Package Identifier	doi:10.5061/dryad.234 **1749 views**
Abstract	Wood performs several essential functions in plants, including mechanically supporting aboveground tissue, storing water and other resources, and transporting sap. Woody tissues are likely to face physiological, structural and defensive trade-offs. How a plant optimizes among these competing functions can have major ecological implications, which have been under-appreciated by ecologists compared to the focus they have given to leaf function. To draw together our current understanding of wood function, we identify and collate data on the major wood functional traits, including the largest wood density database to date (8412 taxa), mechanical strength measures and anatomical features, as well as clade-specific features such as secondary chemistry. We then show how wood traits are related to one another, highlighting functional trade-offs, and to ecological and demographic plant features (growth form, growth rate, latitude, ecological setting). We suggest that, similar to the manifold that tree species leaf traits cluster around the 'leaf economics spectrum', a similar 'wood economics spectrum' may be defined. We then discuss the biogeography, evolution and biogeochemistry of the spectrum, and conclude by pointing out the major gaps in our current knowledge of wood functional traits.
Keywords	evolution, functional ecology, plant economics, trade-offs, wood
Date Deposited	2009-02-04T23:35:24Z

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Please direct all correspondence to G. Lopez-Gonzalez <G.Lopez-Gonzalez@leeds.ac.uk>

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Data from: Novel forests ma ×

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Mascaro J, Hughes RF, Schnitzer SA (2011) Novel forests maintain ecosystem processes after the decline of native tree species. Ecological Monographs 82(2): 221-228. doi:10.1890/11-1014.1

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Abstract

The positive relationship between species diversity (richness and evenness) and critical ecosystem functions, such as productivity, carbon storage, and nutrient cycling, is often used to predict the consequences of extinction. At regional scales, however, plant species richness is mostly increasing rather than decreasing because successful plant species introductions far outnumber extinctions. If these regional increases in richness lead to local increases in diversity, a reasonable prediction is that productivity, carbon storage, and nutrient cycling will increase following invasion, yet this prediction has rarely been tested empirically. We tested this prediction in novel forest communities dominated by introduced species (~ 90% basal area) in lowland Hawaiian rainforests by comparing their functionality to that of native forests. We conducted our comparison along a natural gradient of increasing nitrogen availability, allowing for a more detailed examination of the role of plant functional trait differences (specifically, N2-fixation) in driving possible changes to ecosystem function. Hawai'i is emblematic of regional patterns of species change; it has much higher regional plant richness than it did historically, due to > 1000 plant species introductions and only ~ 71 known plant extinctions--resulting in an approximately 100% increase in richness. At local scales, we found that novel forests had significantly higher tree species richness and higher diversity of dominant tree species. We further found that aboveground biomass, productivity, nutrient turnover (as measured by soil-available and litter-cycled nitrogen and phosphorus), and belowground carbon storage either did not differ significantly or were significantly greater in novel relative to native forests. We found that the addition of introduced N2-fixing tree species on N-limited substrates had the strongest effect on ecosystem function--a pattern found by previous empirical tests. Our results support empirical predictions of the functional effects of diversity, but they also suggest basic ecosystem processes will continue even after dramatic losses of native species diversity if simple functional roles are provided by introduced species. Because large portions of the Earth's surface are undergoing similar transitions from native to novel ecosystems, our results are likely to be broadly applicable.

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NSF Data Management Plan Requirements

Beginning January 18, 2011, proposals submitted to NSF must include a supplementary document of no more than two pages labeled "Data Management Plan" (DMP) . This

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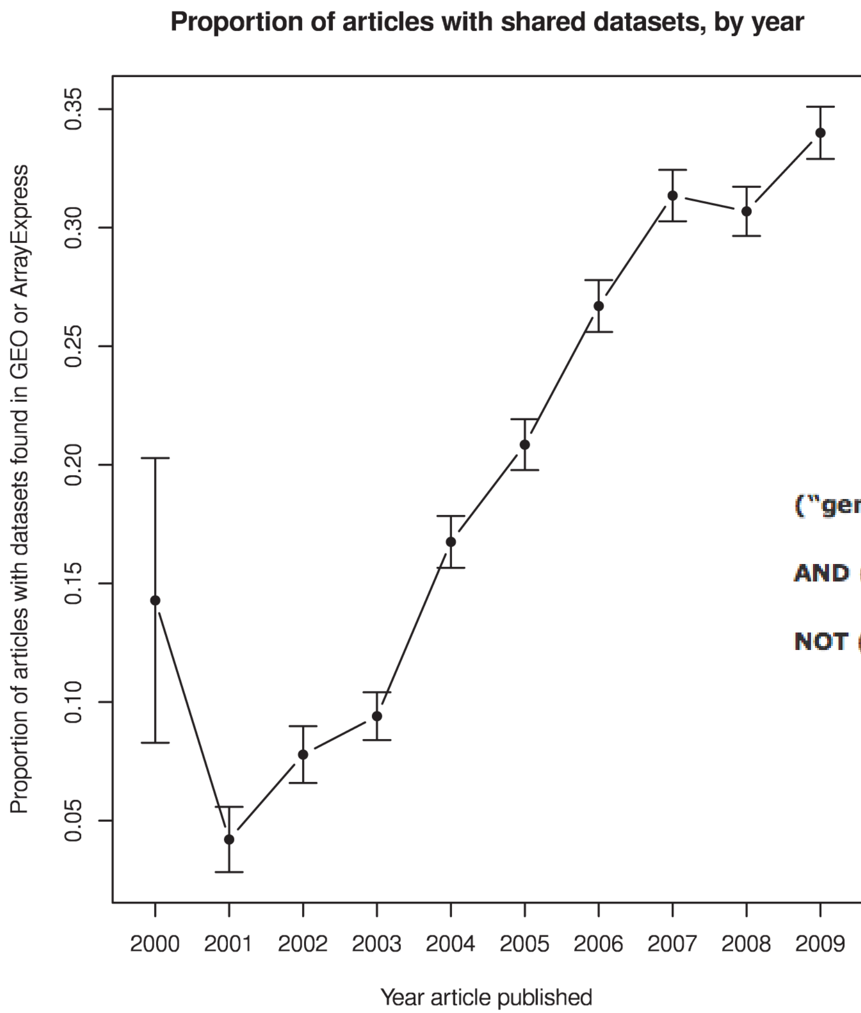
Who Shares? Who Doesn't? Factors Associated with Openly Archiving Raw Research Data



("gene expression" [text] AND "microarray" [text] AND "cell" [text] AND "rna" [text])

AND ("rneasy" [text] OR "trizol" [text] OR "real-time pcr" [text])

NOT ("tissue microarray*" [text] OR "cpg island*" [text])

Piwowar (2011) doi:10.1371/journal.pone.0018657

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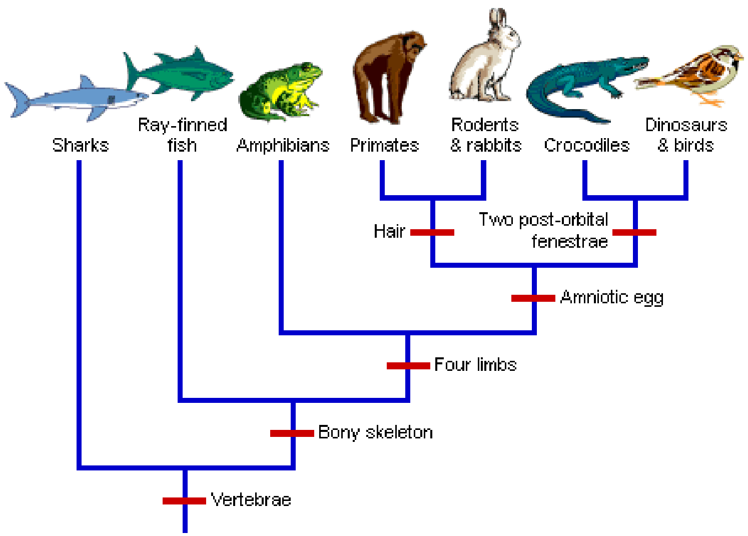

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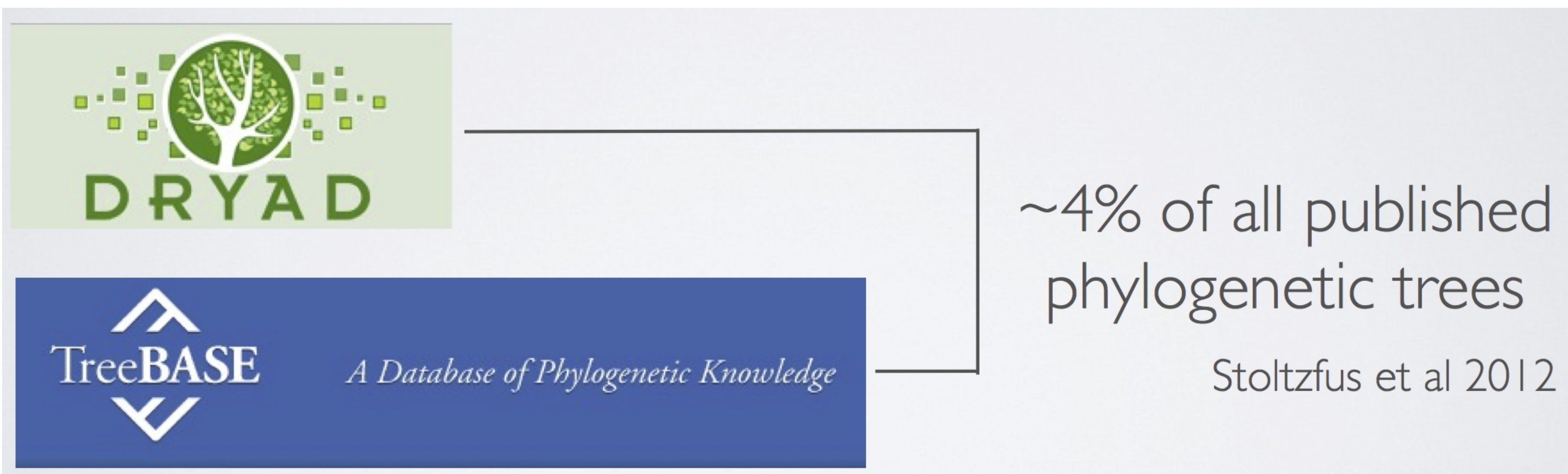

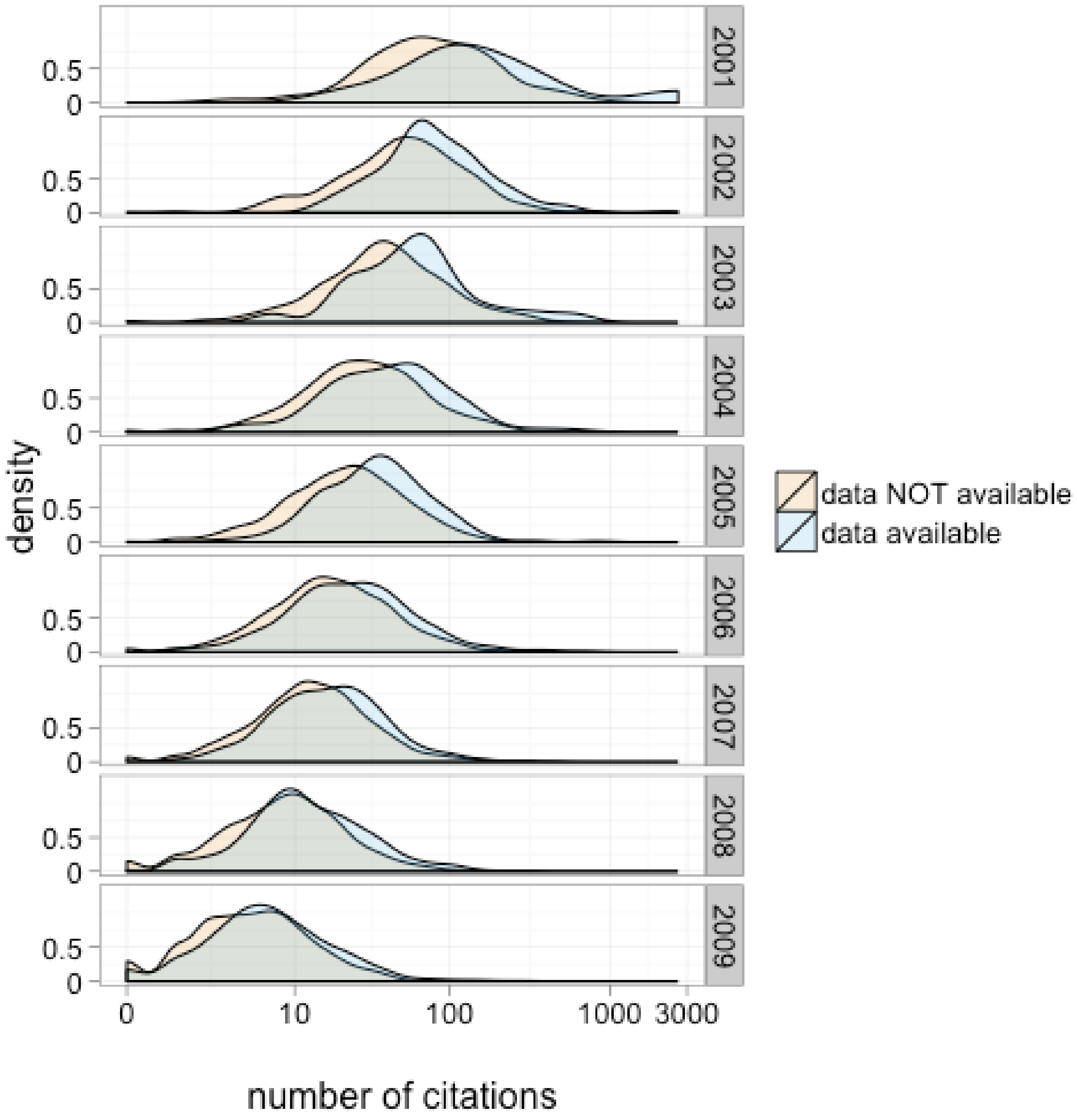

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