A Brief History of Unicorn Husbandry & Other Magical Wonders

wait, what…?!?

da·ta

Noun

da·ta

Noun

1. Factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation.
2. Information output by a sensing device or organ that includes both useful and irrelevant or redundant information and must be processed to be meaningful.
3. Information that can be digitally transmitted or processed.

u·ni·corn

Noun

u·ni·corn

Noun

1. A mythical animal typically represented as a horse with a single straight horn projecting from its forehead.
2. A magical creature who is able to give you the thing you always wanted but thought you could never have.

da·ta in·teg·ri·ty u·ni·corn

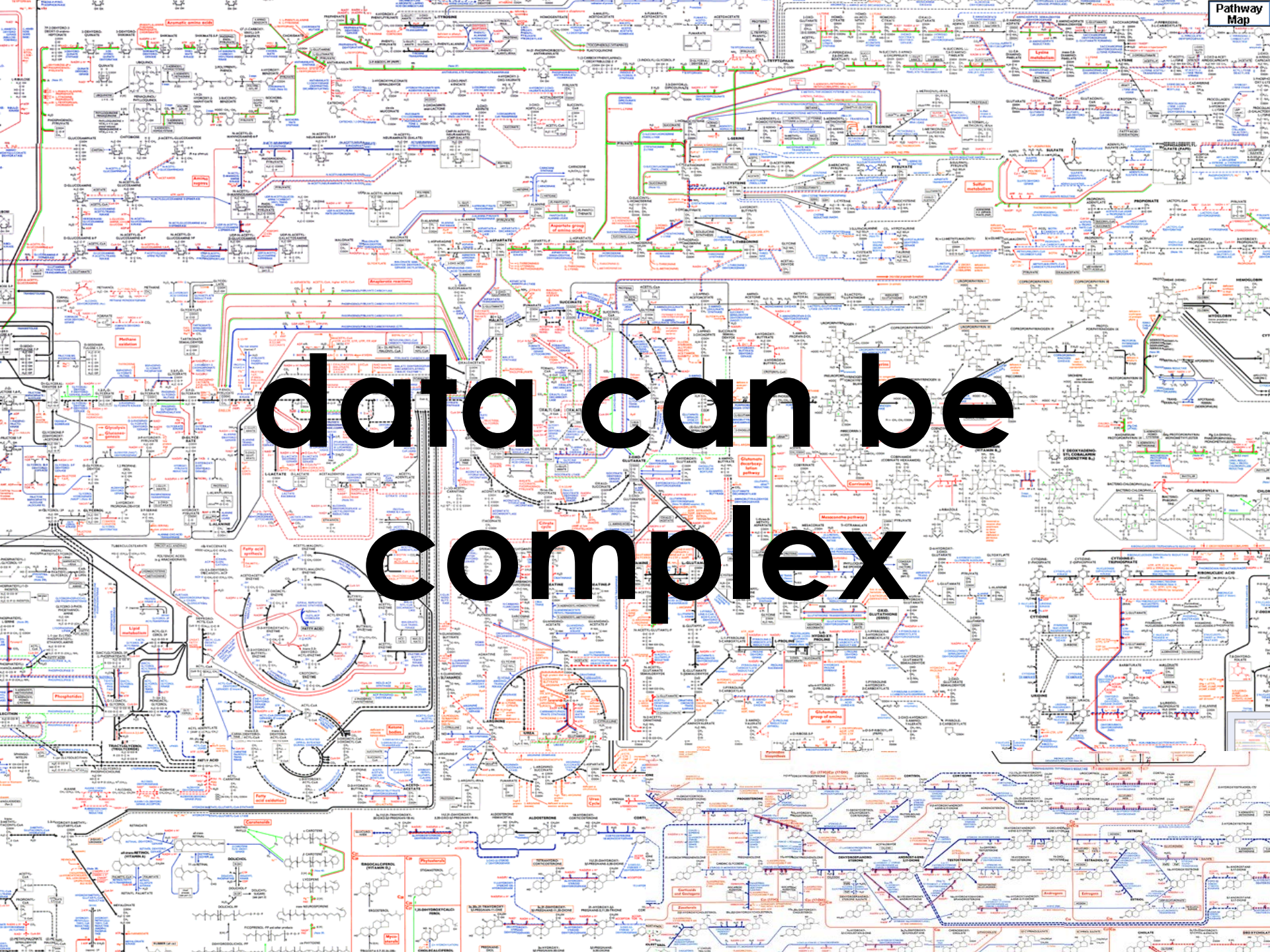
Badass

da·ta in·teg·ri·ty u·ni·corn

Badass

1. A magical creature who can teach about research data management, good research practice, and data integrity. Additionally, the unicorn can improve a data-driven culture by promoting data sharing, improving research reproducibility, and being an all around *badass*.


the magic is real


Pathway Map
data can be complex


data can be
amazing


data can be
messy


data is all
about
discovery


libraries are
about
discovery


data + library =

wait a second…

let‘s walk through this…

data

the data timeline

1. Brilliant Idea!
2. Design Experiment
3. Do Experiment
4. Clean & Organize Data
5. Analyze Data
6. Publish | Store | Share
7. *Fame, Fortune*

the data timeline:
what people think

1. Brilliant Idea!
2. Design Experiment
3. Do Experiment
4. Clean & Organize Data
5. Analyze Data
6. Publish | Store | Share
7. *Fame, Fortune*

the data timeline: what really happens

what people think...

what really happens…

libraries

the library

Books

Old books

Really old books…

Databases

Desks, computers, short pencils

Shhhhhhh!!

Librarians

the library: what people think

Books

Old Books

Really old Books...

Databases

Desks, computers, short pencils

Shhhhhhh!!

Frumpy Librarians

the library: what people think

Books

Old Books

Really old Books…

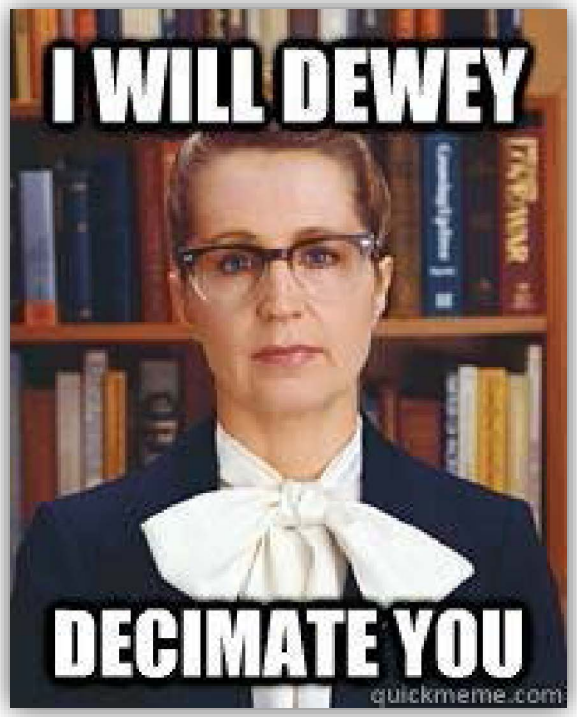
Databases

Desks, computers, short pencils

Shhhhhhh!!

Frumpy Librarians

the library:
what really
happens

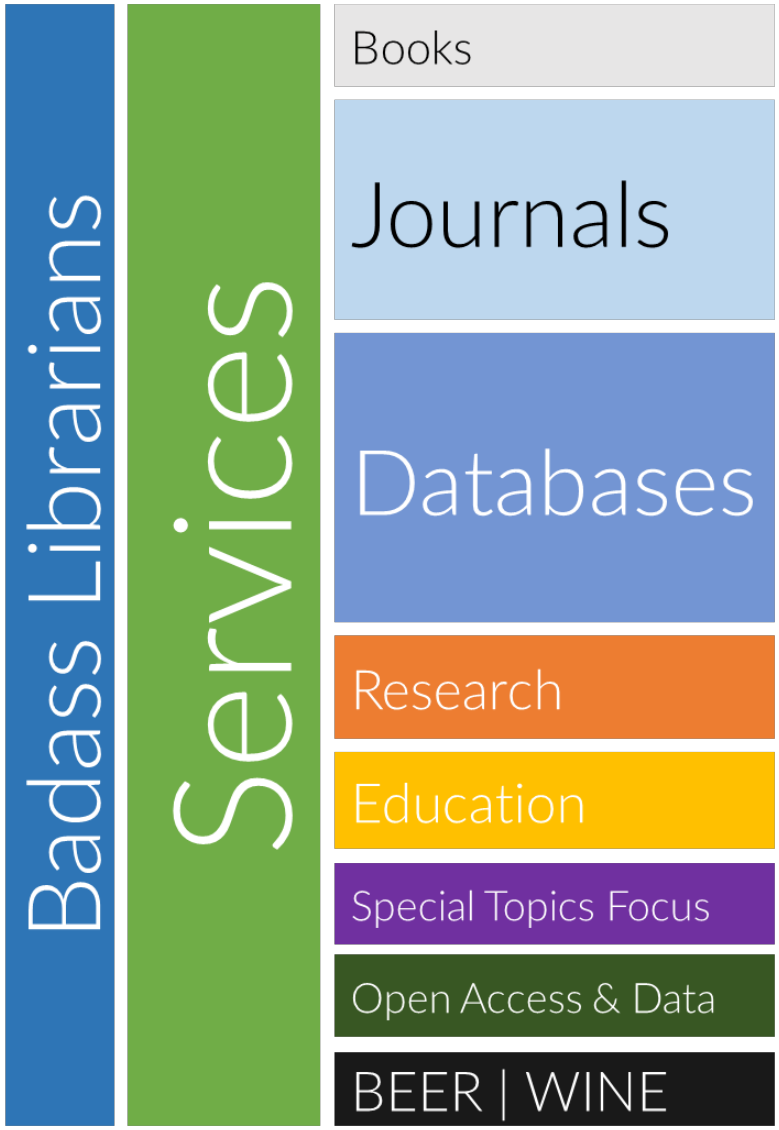


what people think…

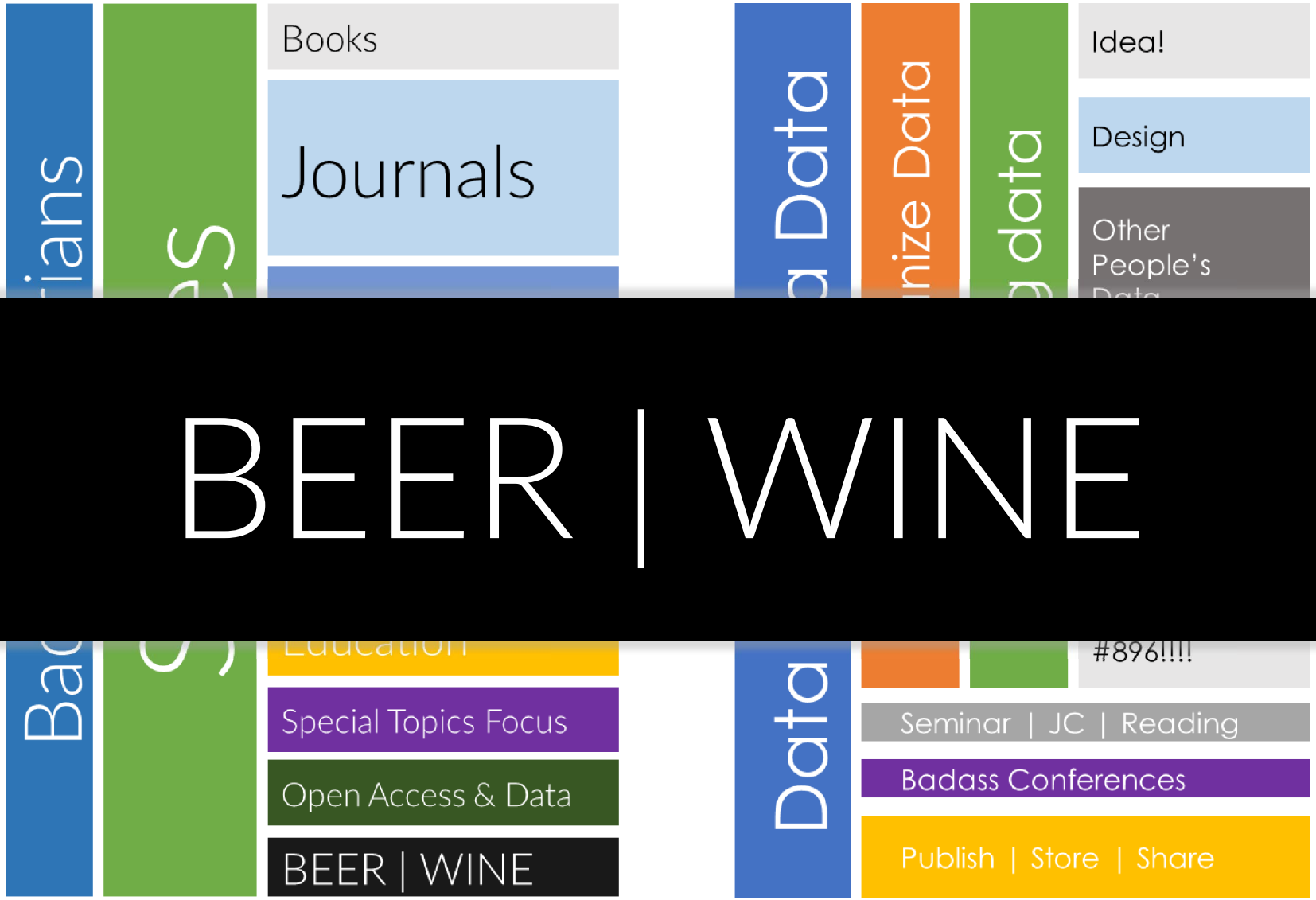
what really happens…

data + libraries

how do we make worlds collide?


Badass Librarians
Services
Books
Journals
Databases
Research
Education
Special Topics Focus
Open Access & Data
BEER | WINE


Data Data Data Data
Clean & Organize Data
Analyzing data
Idea!
Design
Other People's Data
Try #2
Failure!!
BEER | WINE
#896!!!!
Seminar | JC | Reading
Badass Conferences
Publish | Store | Share


Books
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Books
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Seminar | JC | Reading
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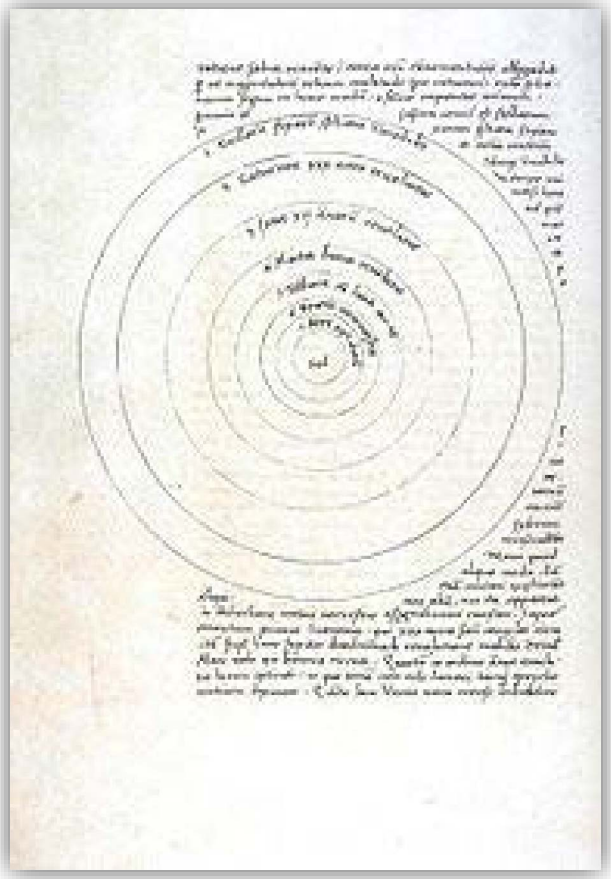
Data
Services

data + libraries

a little history
a shift in thinking
a data discussion
unicorns!

a little history




ANDREAE VESALII
BRVXELLENSIS, SCHOLAE
BASILEAE

PHILOSOPHICAL

TRANSACTIONS:

GIVING SOME

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Vol I.

For Anno 1665, and 166

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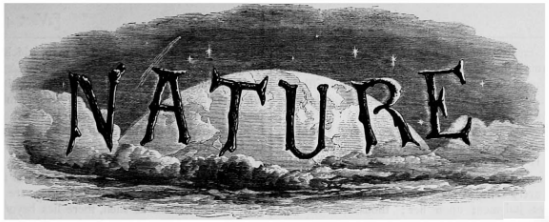
Printers to the Royal Society.



A WEEKLY ILLUSTRATED JOURNAL OF SCIENCE

"To the solid ground
Of Nature trusts the mind which builds for aye."—WORDSWORTH

THURSDAY, NOVEMBER 4, 1869

NATURE: APHORISMS BY GOETHE

NATURE! We are surrounded and embraced by her: powerless to separate ourselves from her, and powerless to penetrate beyond her.

Without asking, or warning, she snatches us up into her circling dance, and whirls us on until we are tired, and drop from her arms.

She is ever shaping new forms: what is, has never yet been; what has been, comes not again. Everything is new, and yet nought but the old.

We live in her midst and know her not. She is incessantly speaking to us, but betrays not her secret. We constantly act upon her, and yet have no power over her.

The one thing she seems to aim at is Individuality; yet she cares nothing for individuals. She is always building up and destroying; but her workshop is inaccessible.

Her life is in her children; but where is the mother? She is the only artist; working-up the most uniform material into utter opposites; arriving, without a trace of effort, at perfection, at the most exact precision, though always veiled under a certain softness.

Each of her works has an essence of its own; each of her phenomena a special characterisation: and yet their diversity is in unity.

She performs a play; we know not whether she sees it herself, and yet she acts for us, the lookers-on.

Incessant life, development, and movement are in her, but she advances not. She changes for ever and ever, and rests not a moment. Quietude is inconceivable to her, and she has laid her curse upon rest. She is firm. Her steps are measured, her exceptions rare, her laws unchangeable.

She has always thought and always thinks; though not as a man, but as Nature. She broods over an all-comprehending idea, which no searchin find out.

Mankind dwell in her and she in them. W men she plays a game for love, and rejoices th they win. With many, her moves are so hidde the game is over before they know it.

That which is most unnatural is still Natur stupidest philistinism has a touch of her Whoso cannot see her everywhere, sees h where rightly.

She loves herself, and her innumerable ey affections are fixed upon herself. She has herself that she may be her own delight causes an endless succession of new capacit enjoyment to spring up, that her insatiable sy may be assuaged.

She rejoices in illusion. Whoso destroys it self and others, him she punishes with the tyranny. Whoso follows her in faith, him she as a child to her bosom.

Her children are numberless. To none altogether miserly; but she has her favourit whom she squanders much, and for whom she great sacrifices. Over greatness she sprea shield.

She tosses her creatures out of nothingne tells them not whence they came, nor whithe go. It is their business to run, she knows th Her mechanism has few springs—but they wear out, are always active and manifold.

The spectacle of Nature is always new, for always renewing the spectators. Life is he exquisite invention; and death is her expe trivance to get plenty of life.

She wraps man in darkness, and makes him f long for light. She creates him dependent up earth, dull and heavy; and yet is always shaki until he attempts to soar above it.

B

SCIENCE:

A WEEKLY RECORD OF SCIENTIFIC PROGRESS.

ILLUSTRATED.

VOLUME I.—

JULY TO DECEMBER.

EDITED BY JOHN MICHELS.

PUBLISHED AT 229 BROADWAY,
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J Forensic Sci, May 2006, Vol. 51, No. 3
doi:10.1111/j.1556-4029.2006.00135.x
Available online at: www.blackwell-synergy.com

CASE REPORT

Brett E. Harding,[1] B.A., M.B.A. and Barbara C. Wolf,[1] M.D.

Alligator Attacks in Southwest Florida

ABSTRACT: The American alligator inhabits bodies of fresh water in Florida and other southeastern states. Although attacks on pets are frequent, alligator attacks on humans are relatively rare because of the animal's natural fear of man. Because of the rarity of attacks on humans, the pathologic findings and pathophysiology of death in such cases have not been well characterized in the literature. We report three cases of fatal alligator attacks that occurred in southwest Florida, each with different pathologic findings and mechanisms of death. Although the cause of death in each case was attributed to the alligator attack, the mechanisms of death differed and included exsanguination because of amputation of an extremity, overwhelming sepsis, and drowning. These cases illustrate the varied pathophysiologies associated with deaths due to alligator attacks on humans and the features that distinguish alligator bites from those of other aquatic predators.

KEYWORDS: forensic science, forensic pathology, alligator attacks, autopsy, cause of death

The American alligator (*Alligator mississippiensis*) is found in the southeastern United States in fresh and sometimes brackish waters (1). The highest populations are in Florida and Louisiana. It was estimated that the Florida adult wild alligator population is in the range of 1–2 million (2). Alligator attacks are relatively rare, as alligators instinctively avoid humans. The Florida Fish and Wildlife Conservation Commission has documented 339 attacks on humans since 1948; 15 of these attacks were fatal (2). When such perdition occurs, the offending animal has frequently been desensitized to the presence of humans. Most often this is a result of the illegal feeding or discarding of food or animal scraps into nearby bodies of water (1,2). Attacks may also occur during the nesting season in late spring and summer, when alligators are most territorial.

Because of the relative rarity of fatal alligator attacks on humans, the pathologic findings in cases of such attacks have not been well characterized. We undertook the current study to detail the anatomic findings and causes of death that are associated with fatal alligator attacks.

Materials and Methods

The files of the Florida District 21 Medical Examiner's Office, encompassing Lee, Glades, and Hendry counties, were searched for cases in which death was attributed to an alligator attack. A forensic investigator from the Medical Examiner Office had initially investigated all of the cases, and the Office had performed a complete autopsy on the body of each deceased. The investigative reports, the reports of the postmortem examinations and postmortem toxicologic studies were reviewed. The autopsy reports were reviewed for cause and manner of death and for the presence and nature of the injuries as well as for evidence of pre-existing natural disease. Information pertaining to the circumstances of death was obtained from the investigators' reports.

[1]Office of the District 21 Medical Examiner, Fort Myers, FL 33907.

Received 22 June 2005; and in revised form 8 Oct. and 30 Dec. 2005; accepted 30 Dec. 2005; published 21 April 2006.

Results

Three cases of alligator attacks resulting in death were identified. Six other cases were excluded because the autopsy or investigative findings indicated that the alligator-inflicted injuries were postmortem, i.e., subsequent to death from another cause.

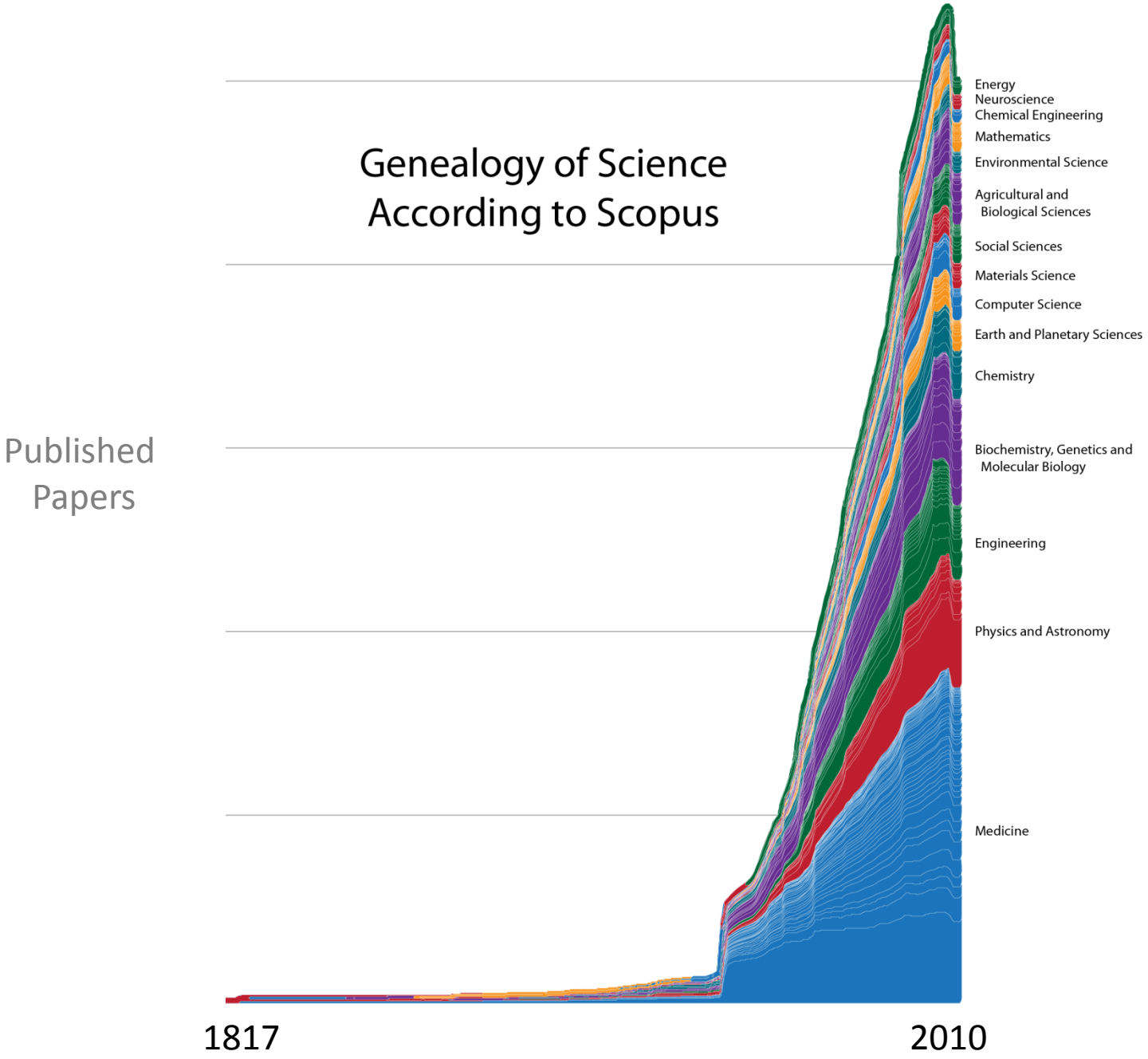
Case Reports

Case #1

A 20-year-old woman visiting her grandparents in Fort Myers, Florida, was found dead floating in a nearby lake. She had expressed a desire to swim in the lake, and had been warned of the presence of alligators, but dismissed the warnings. She had last been seen alive at 02:00 hours. Upon awakening at 10:00 hours, her father discovered her nightgown by the lake. Sheriff's deputies found her body floating in the lake after a brief search. Examination of her body at the scene revealed a traumatic amputation of the right arm at the level of the mid-humerus (Fig. 1). The body also showed numerous skin tears, puncture wounds, and ecchymoses. The body was transferred to the Medical Examiner's Office for postmortem examination.

The autopsy revealed multiple patterned abrasions and perforating injuries, consistent with teeth marks, on the soft tissues surrounding the area of amputation of the right arm. The underlying tissues were extensively torn and fragmented, and the bones were fractured. The distal left arm showed two large gaping defects in addition to multiple patterned abrasions and puncture wounds. Similar wounds were noted on the left hand. Superficial wounds were identified on the chest, back, and lower extremities. There were two puncture wounds of the scalp with penetration of the underlying skull. The remainder of the autopsy was significant only for the presence of white, frothy secretions in the tracheobronchial tree, associated with pulmonary congestion and edema.

21,000
journals


Genealogy of Science
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Biological Sciences
Social Sciences
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Computer Science
Earth and Planetary Sciences
Chemistry
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M'hamed el Aisati (2010)

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articles

NEWS

Nation Shudders At Large Block Of Uninterrupted Text

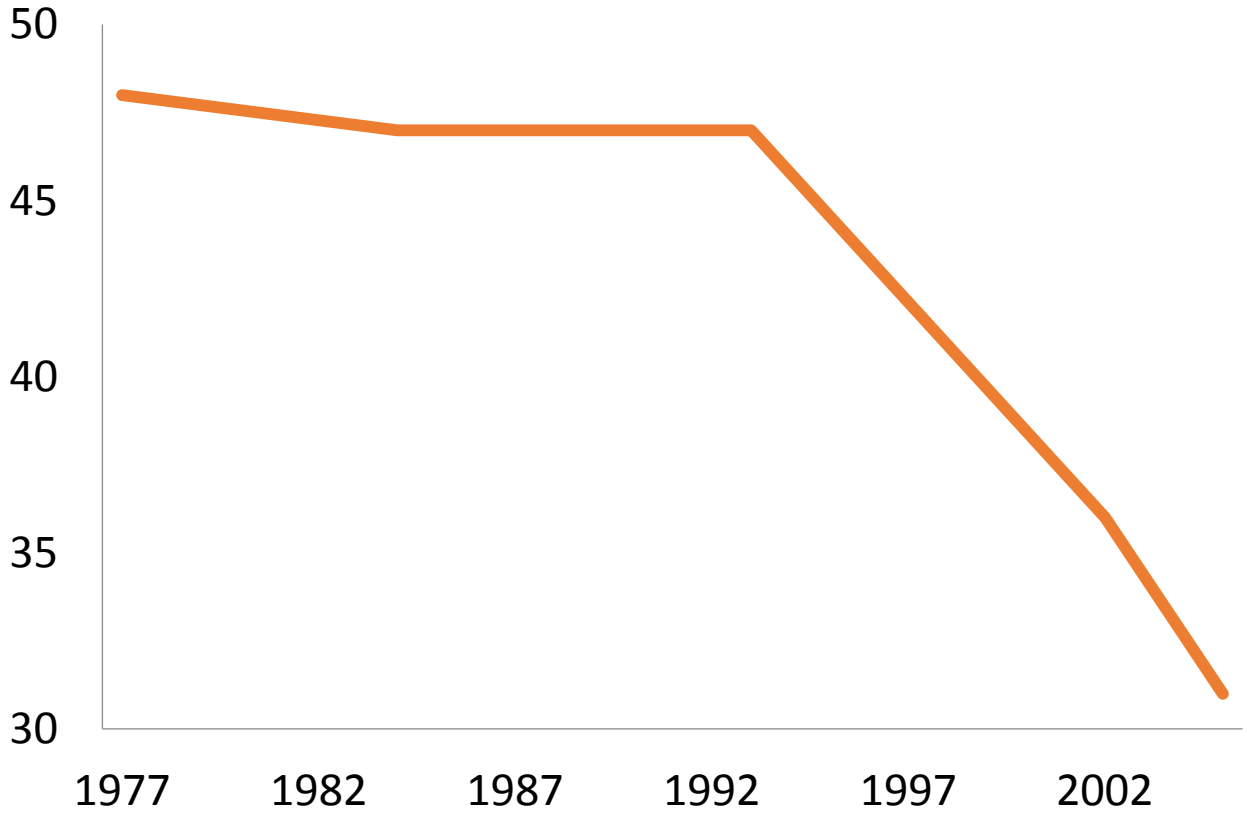
MARCH 9, 2010 | ISSUE 46•10

The giant mass of prose was devoid of so much as a large pulled quote for readers to glance at before moving on.

WASHINGTON—Unable to rest their eyes on a colorful photograph or boldface heading that could be easily skimmed and forgotten about, Americans collectively recoiled Monday when confronted with a solid block of uninterrupted text.

Dumbfounded citizens from Maine to California gazed helplessly at the frightening chunk of print, unsure of what to do next. Without an illustration, chart, or embedded YouTube video to ease them in, millions were frozen in place, terrified by the sight of one long, unbroken string of English words.

"Why won't it just tell me what it's about?" said Boston resident Charlyne Thomson, who was bombarded with the overwhelming mass of black text late Monday afternoon. "There



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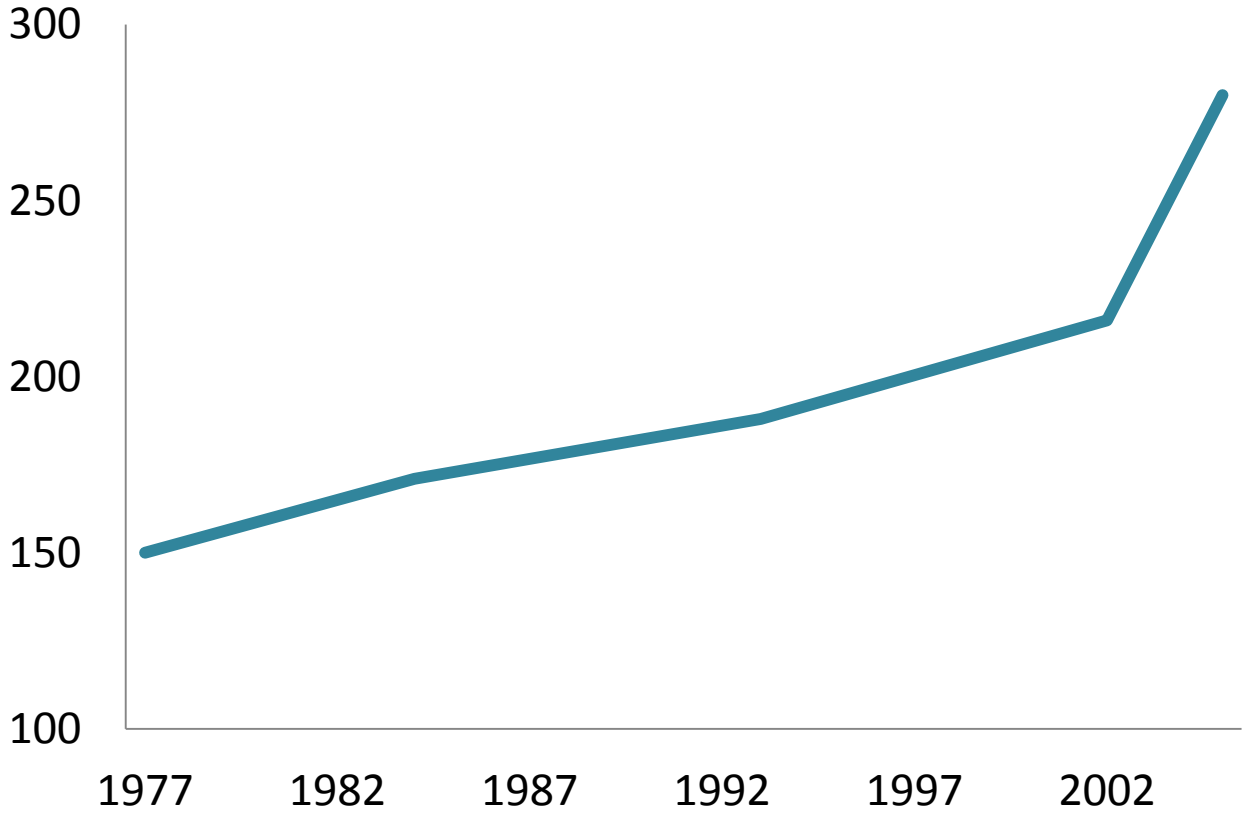


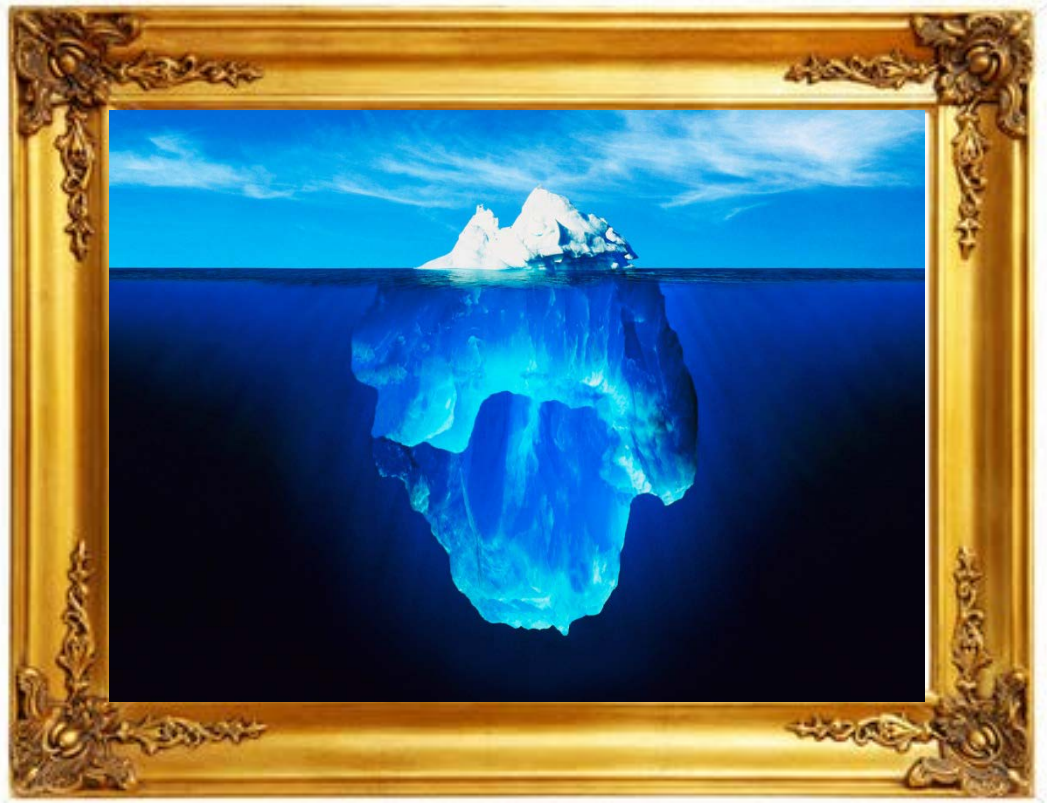
Tenopir and King (2007) TRACE Archive

scientists spend **one month** a year reading journal articles

that’s just journal articles…

a shift in thinking

articles



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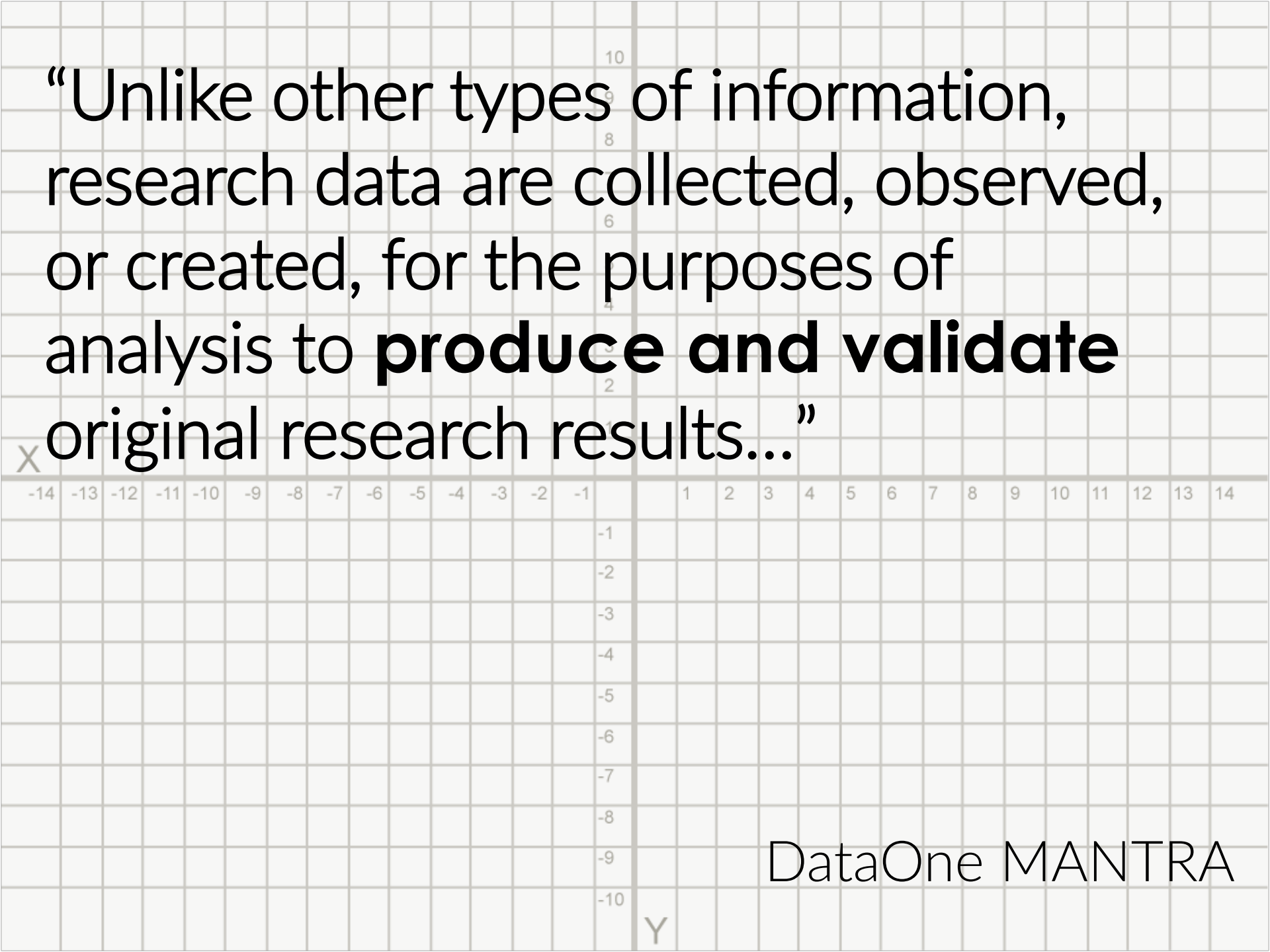
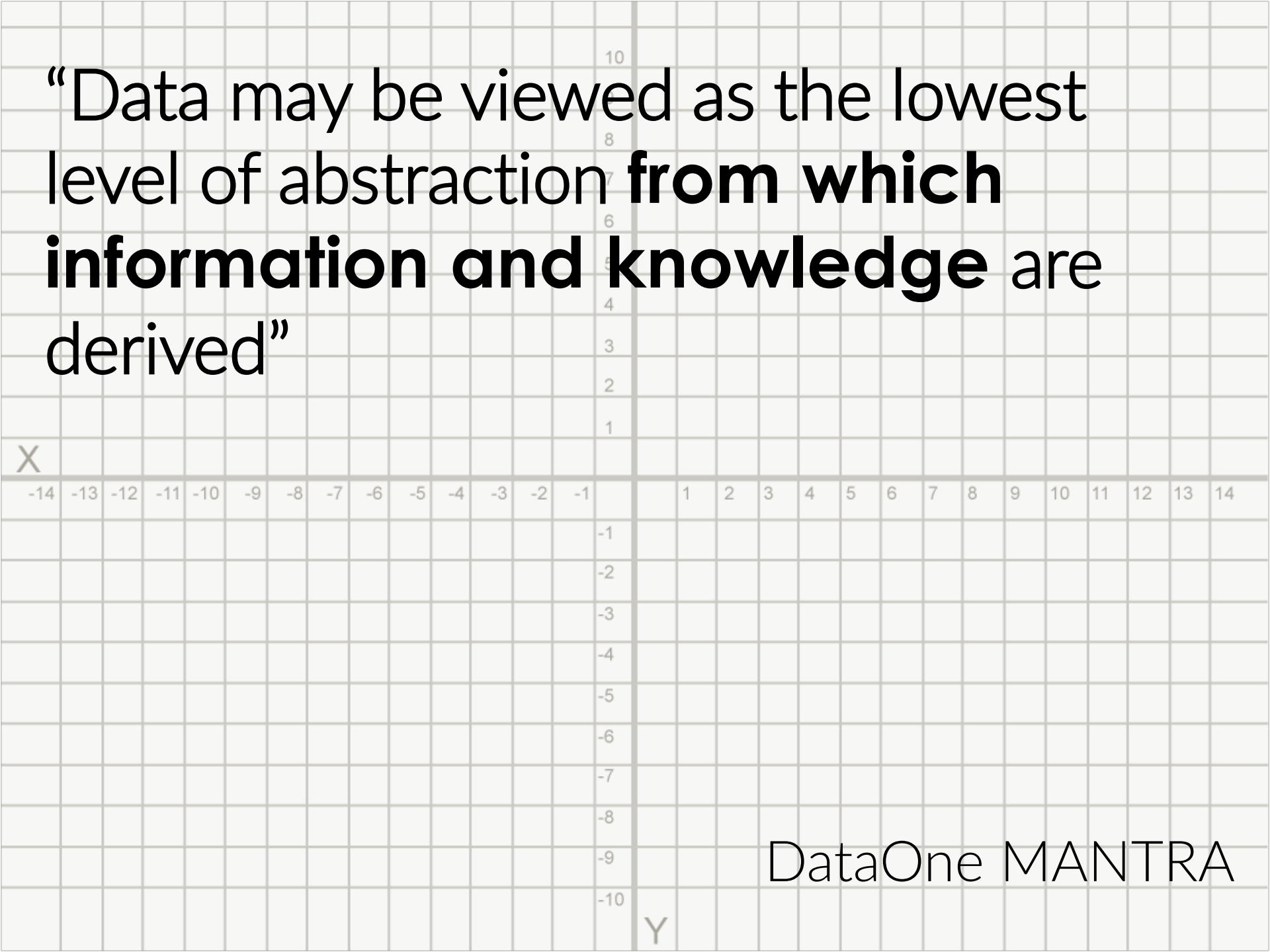

"Unlike other types of information, research data are collected, observed, or created, for the purposes of analysis to **produce and validate** original research results..."
DataOne MANTRA

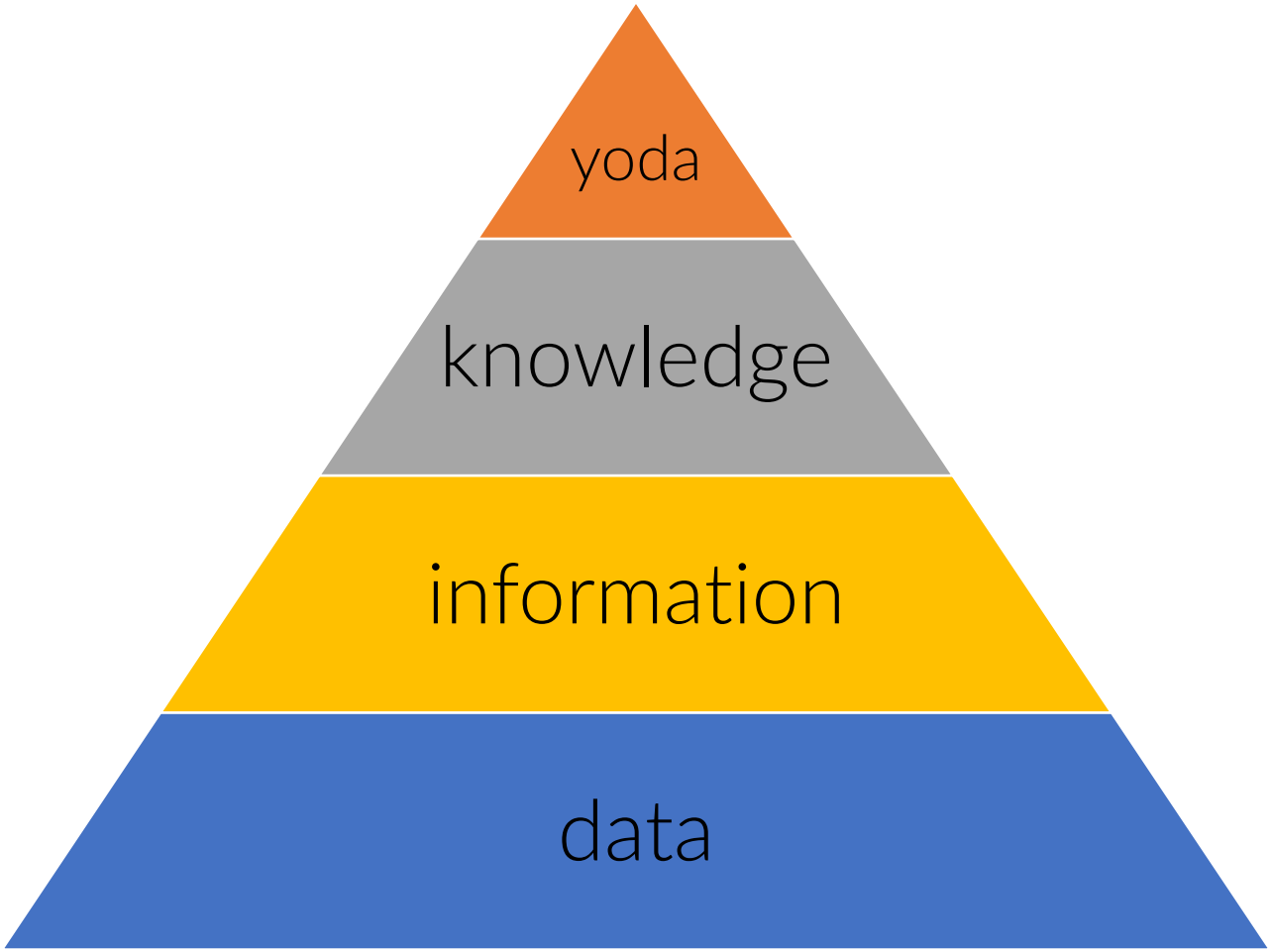
"Data may be viewed as the lowest level of abstraction **from which information and knowledge** are derived"



DataOne MANTRA

“Back to Basics”

Christina Aguilera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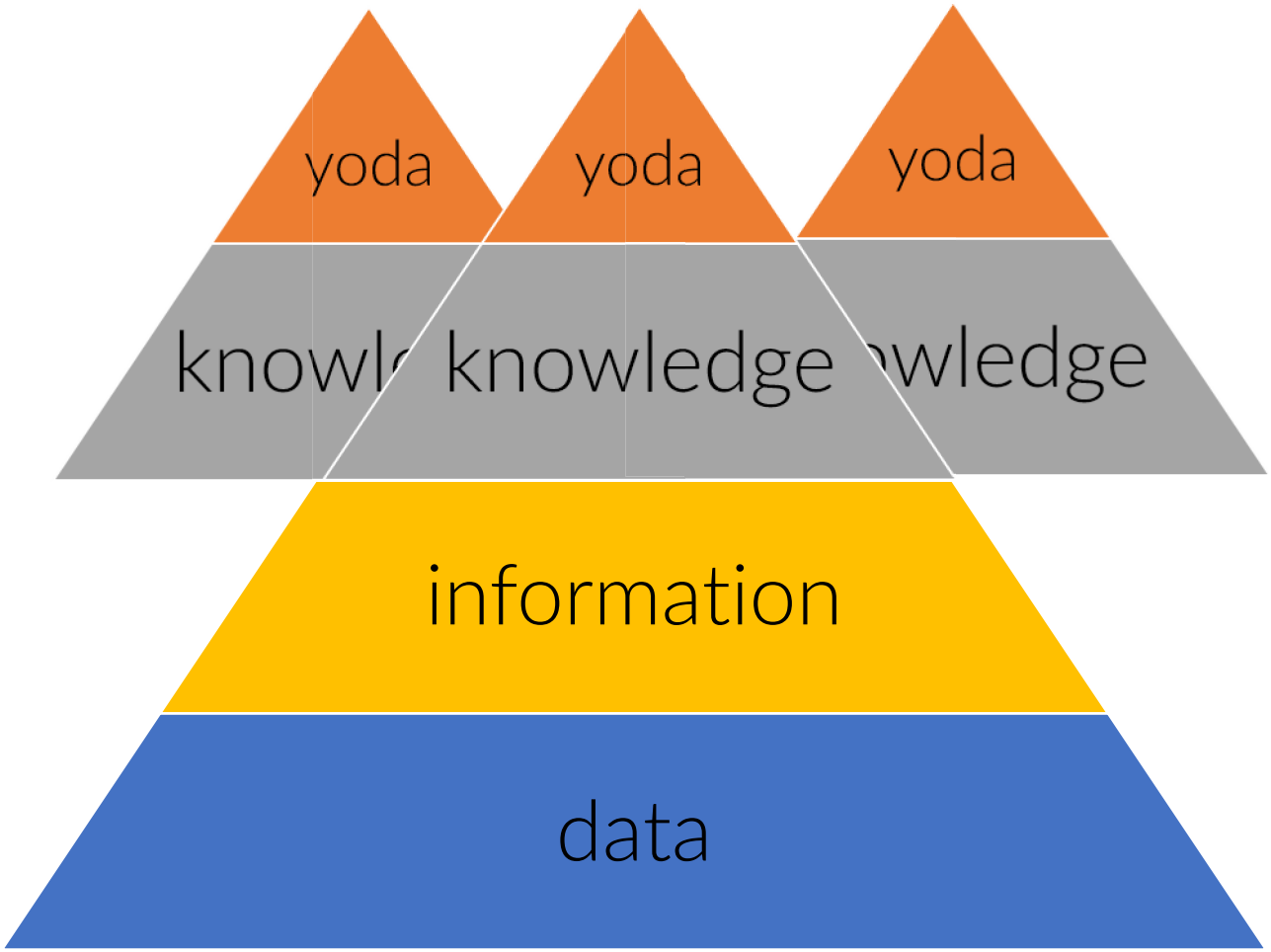
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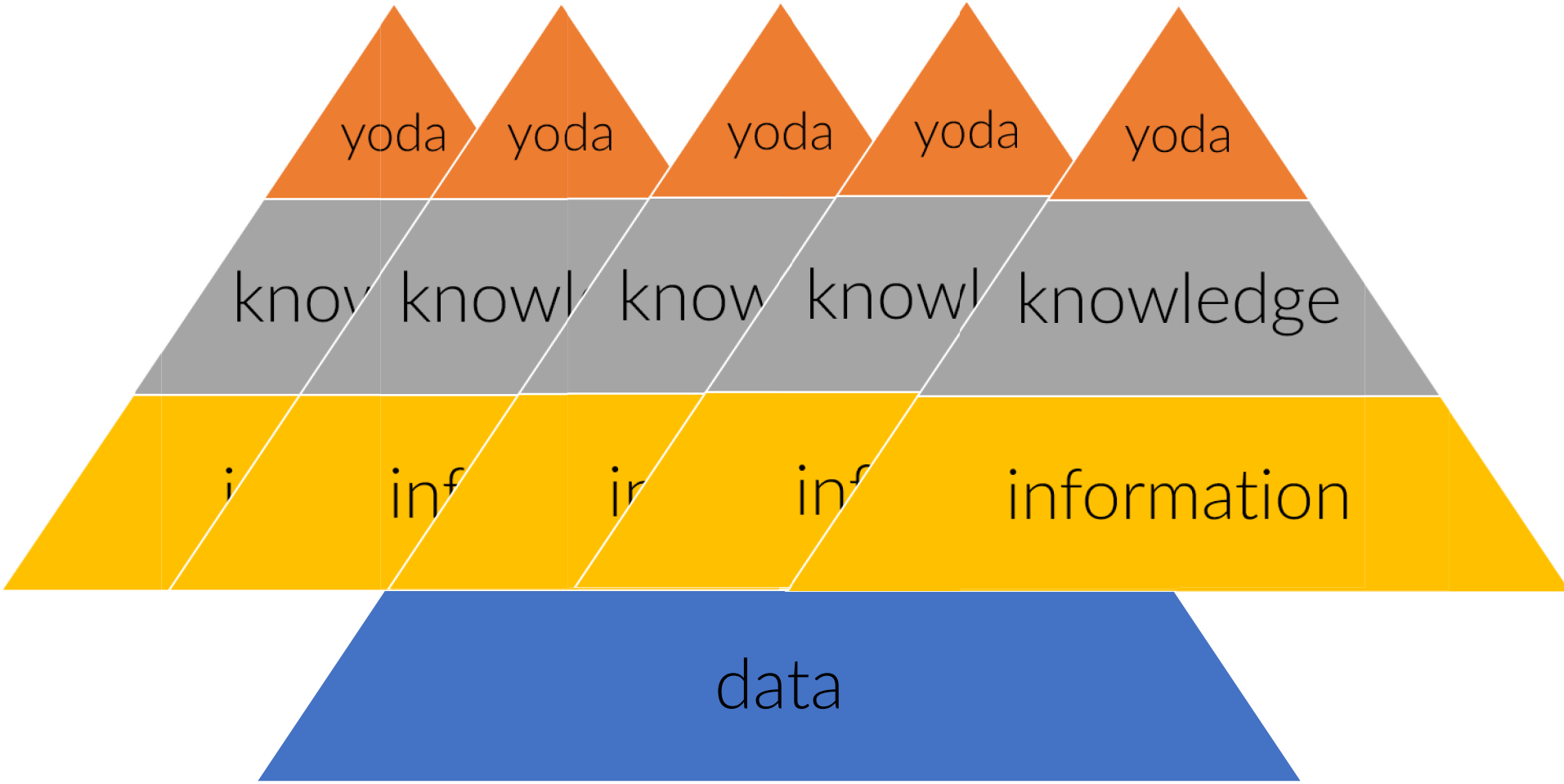
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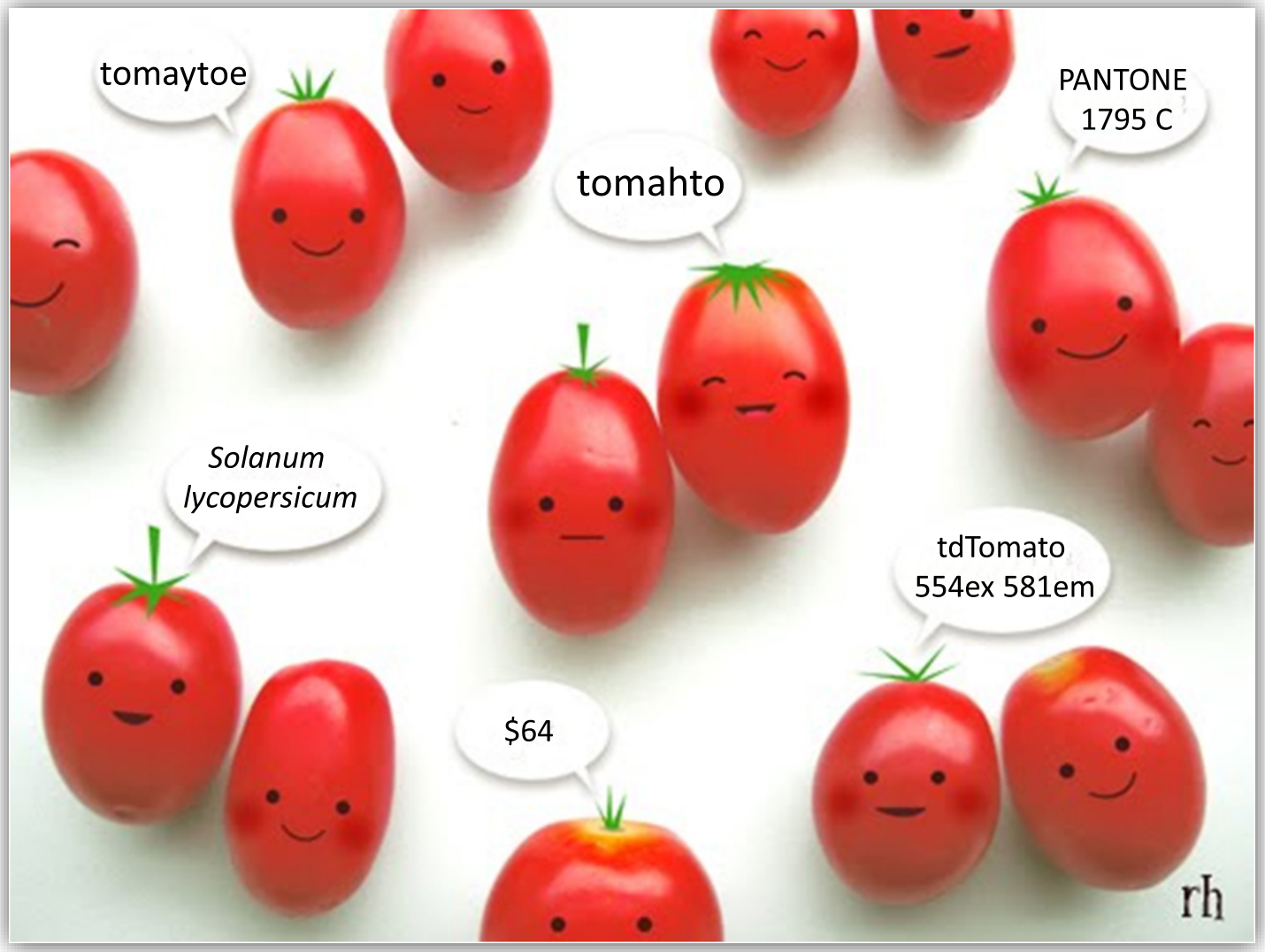
a data discussion
a fugue in 4 parts

<1>



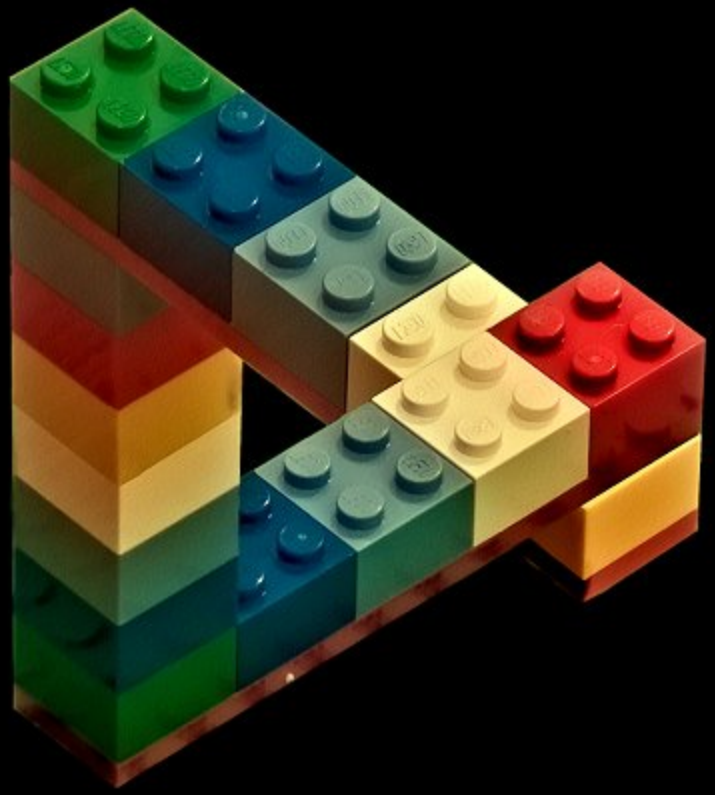
http://rachaelherbert.blogspot.com/2010/07/you-say-tomatoe.html

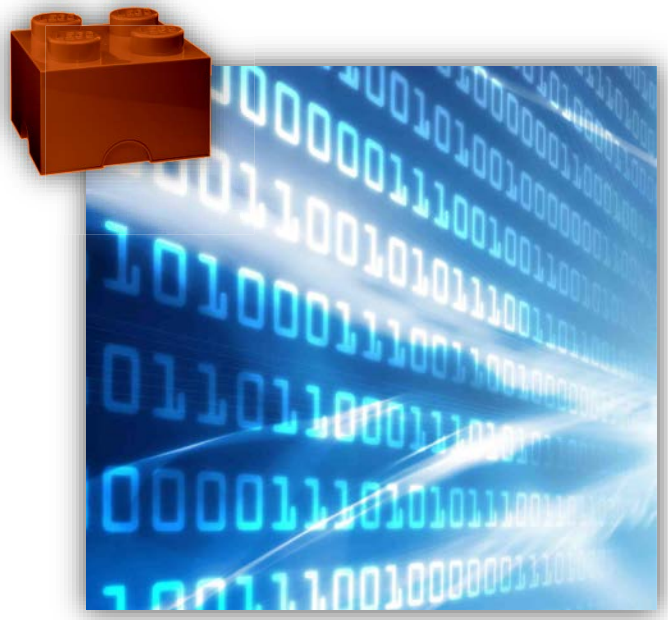
Image from www.blackhealthzone.com

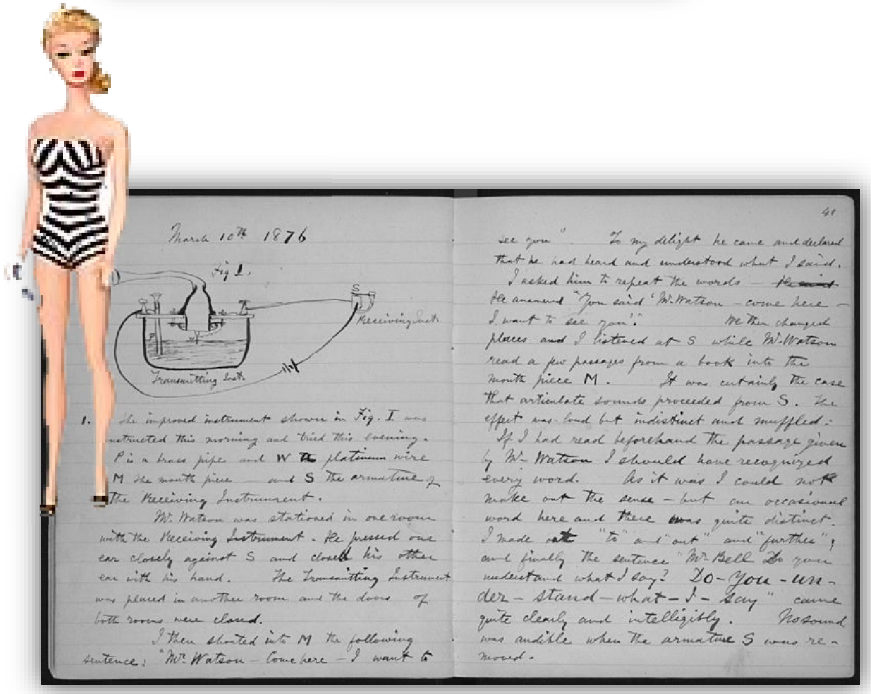
data means different things
to different people:
describe, document, metadata

<2>

Image from Nathan Sawaya, LEGO Artist







March 10th 1876

Fig 1.

1. The improved instrument shown in Fig. I was constructed this morning and tried this evening. P is a brass pipe and W the platinum wire M the mouth piece — and S the armature of the Receiving Instrument.

Mr Watson was stationed in one room with the Receiving Instrument. He pressed one ear closely against S and closed his other ear with his hand. The transmitting instrument was placed in another room and the doors of both rooms were closed.

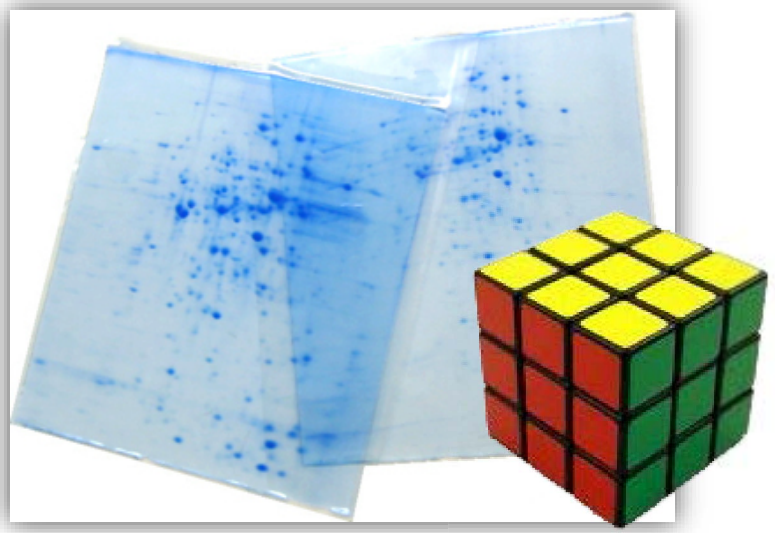
I then shouted into M the following sentence: "Mr Watson — Come here — I want to

41

see you" To my delight he came and declared that he had heard and understood what I said.

I asked him to repeat the words — He answered "You said 'Mr Watson — come here — I want to see you'." We then changed places and I listened at S while Mr Watson read a few passages from a book into the mouth piece M. It was certainly the case that articulate sounds proceeded from S. The effect was loud but indistinct and muffled.

If I had read beforehand the passage given by Mr Watson I should have recognized every word. As it was I could not make out the sense — but an occasional word here and there was quite distinct. I made out "to" and "out" and "further", and finally the sentence "Mr Bell do you understand what I say? Do-you-understand — stand — what — I — say" came quite clearly and intelligibly. No sound was audible when the armature S was removed.



diverse data does not spontaneously assemble:
curate, standardize, share

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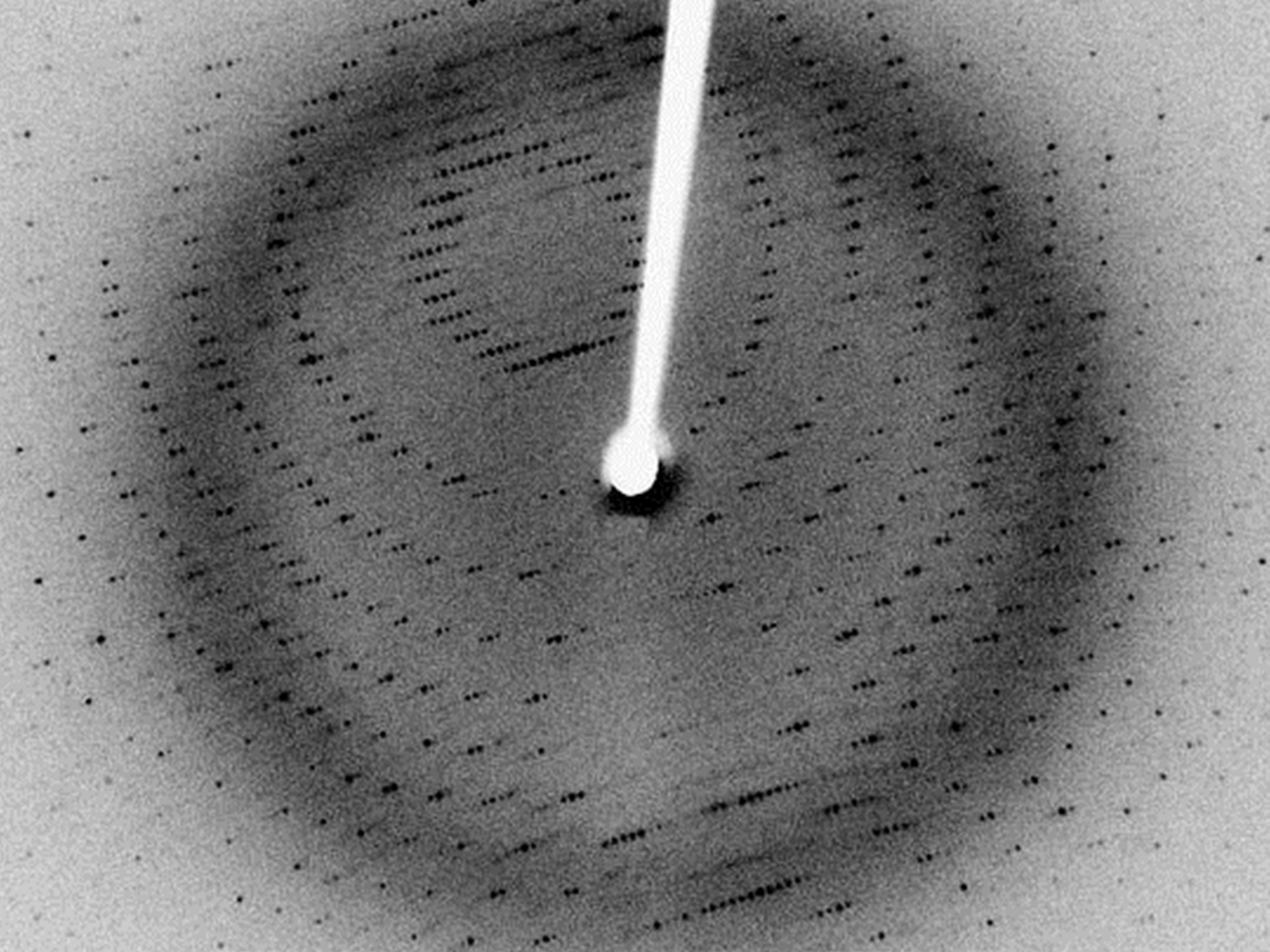

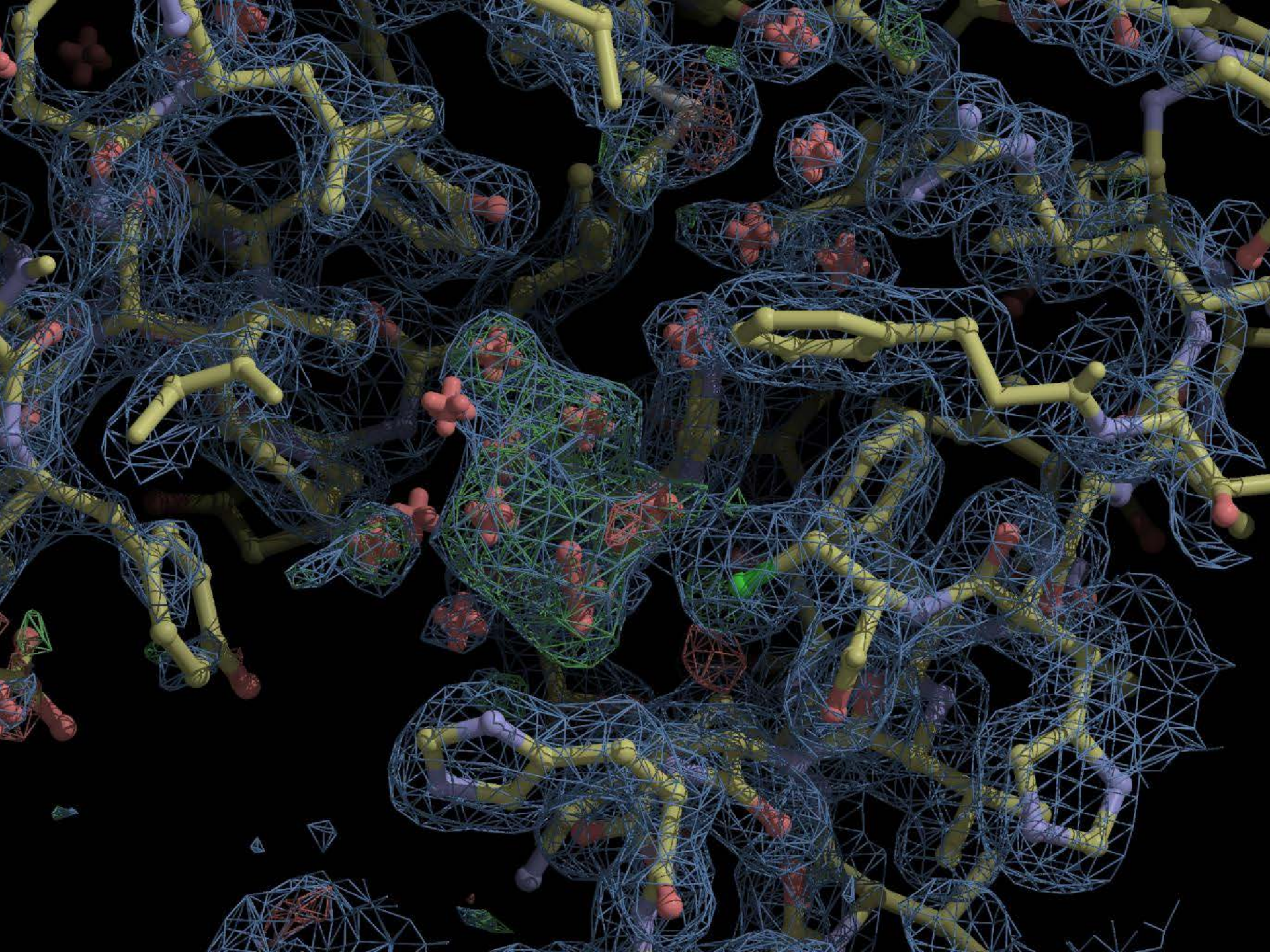

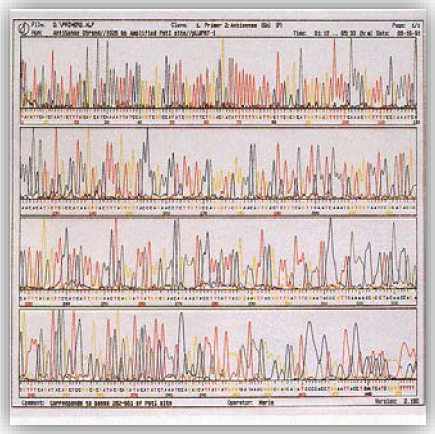

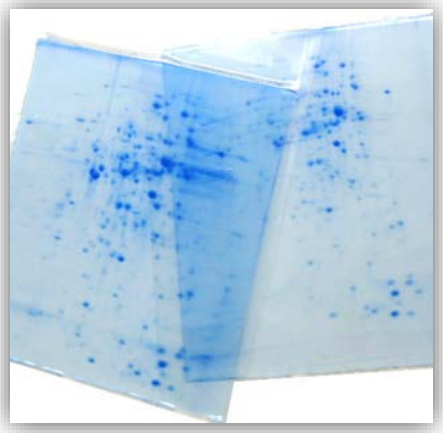

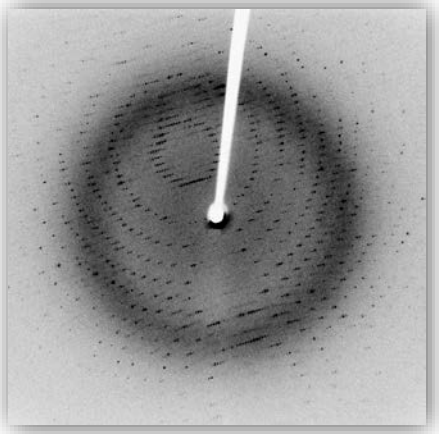

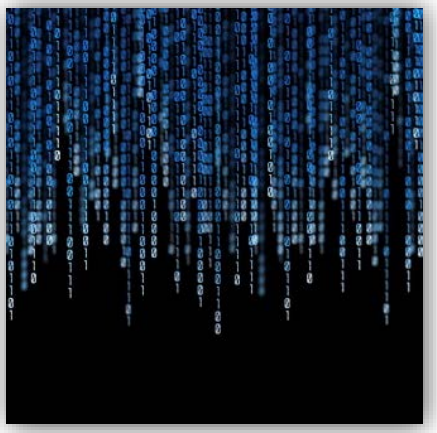

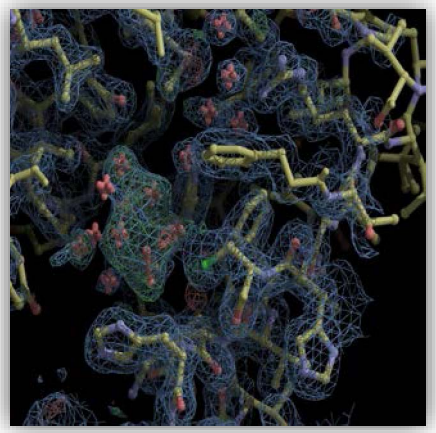

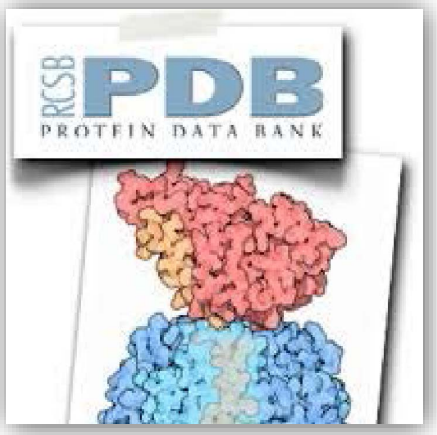
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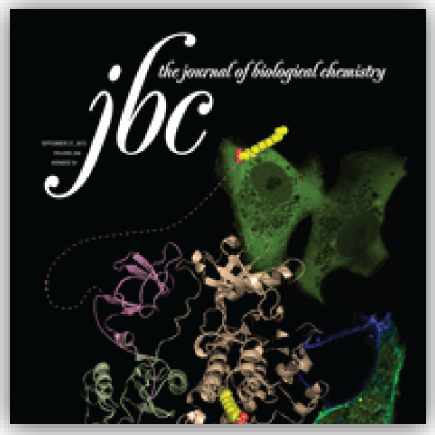
the journal of biological chemistry
jbc


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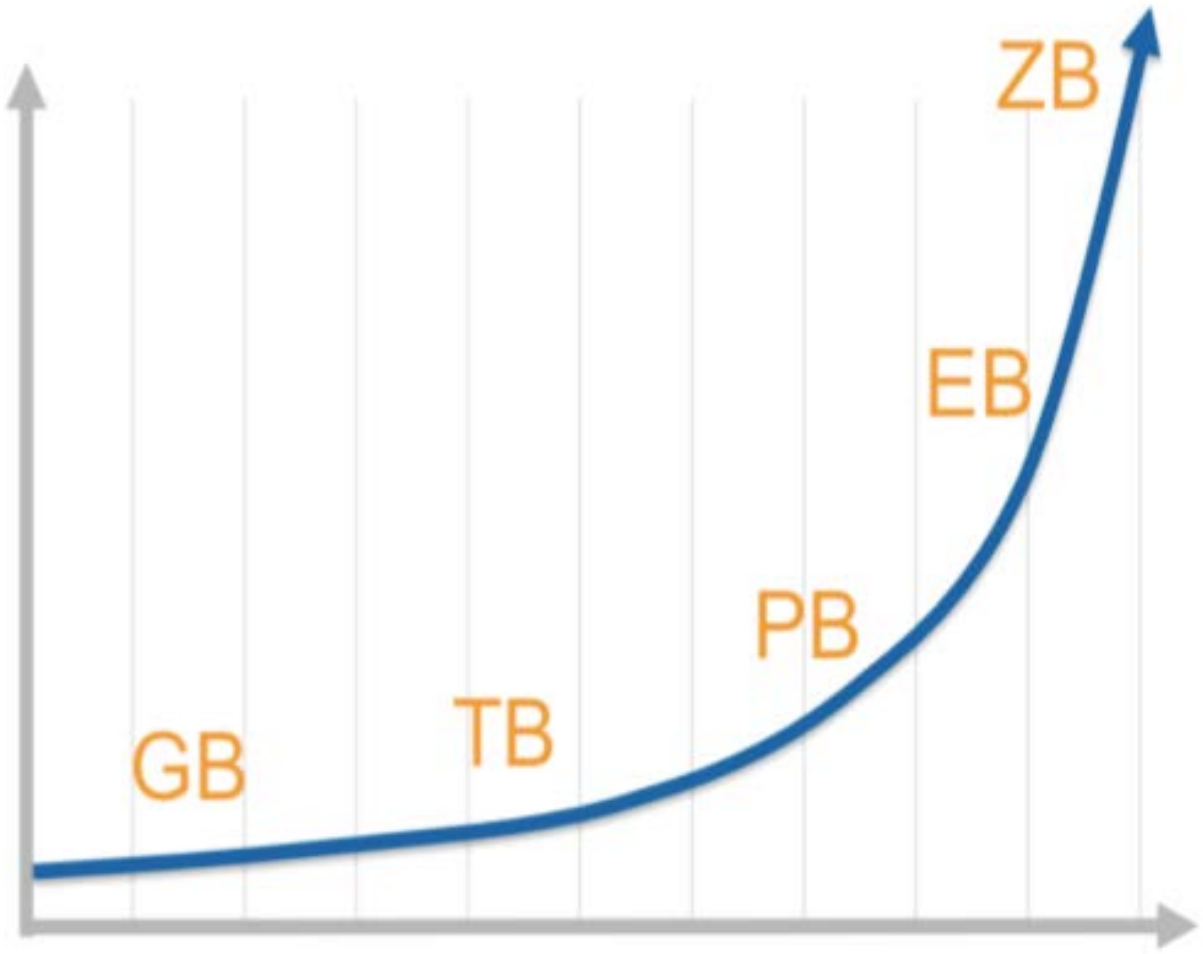
Portland

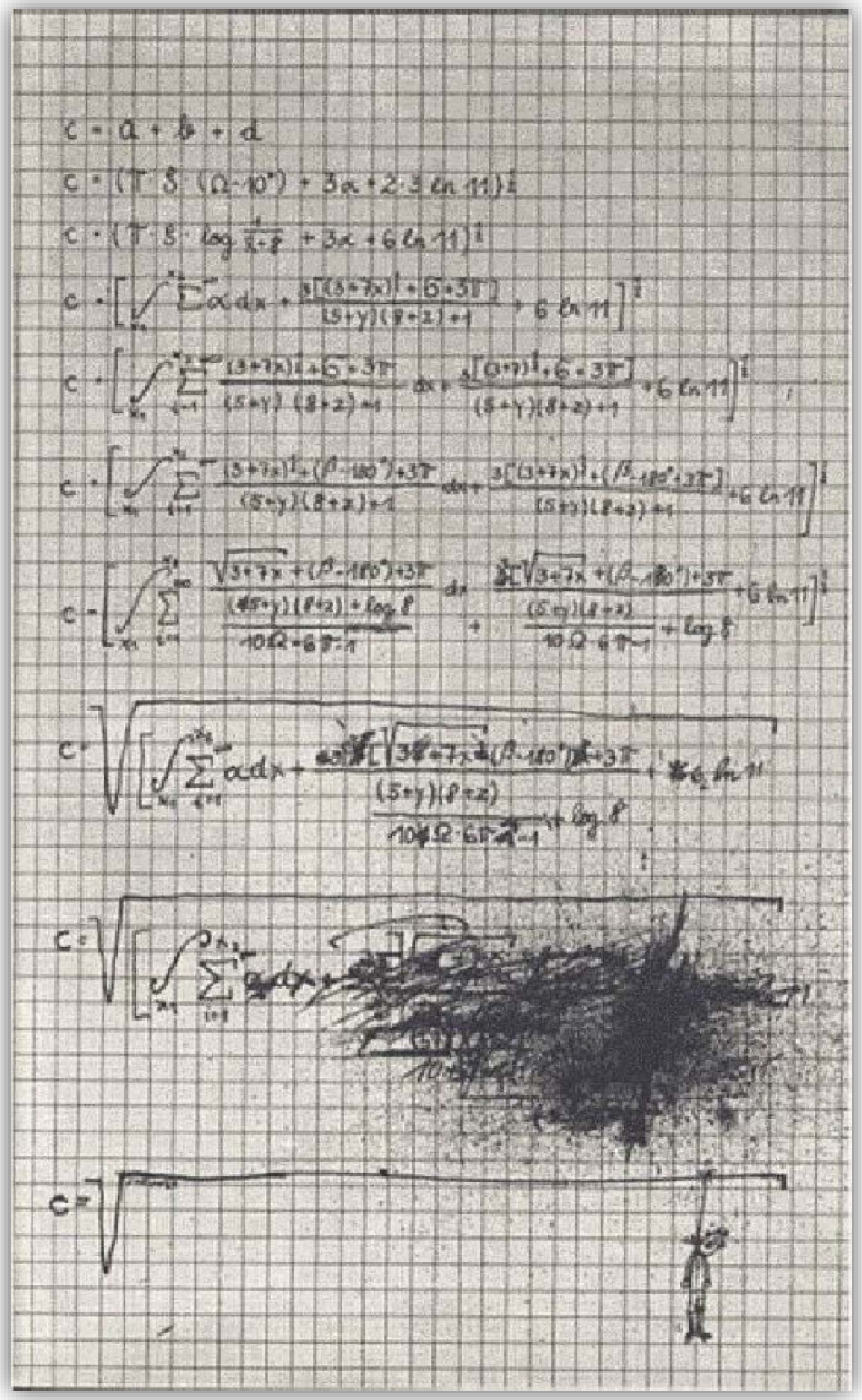

IN CONCLUSION,
AAAAAAAAAAAA!!!
THE BEST THESIS DEFENSE IS A GOOD THESIS OFFENSE.


A Brief History of
Unicorn Husbandry &
Other Magical Wonders

data is fluid:
workflow, organization


24/7
365


ZB
EB
PB
TB
GB



“We are drowning in information but starved for knowledge”

John Naisbitt

“We are drowning in data but starved for knowledge”

Jackie’s bad paraphrase of John Naisbitt

* take a deep breath *

there's a whole lot of data:
the only way to survive
is to be or work with a unicorn

unicorns!


library
services


(we've been at this for a while)

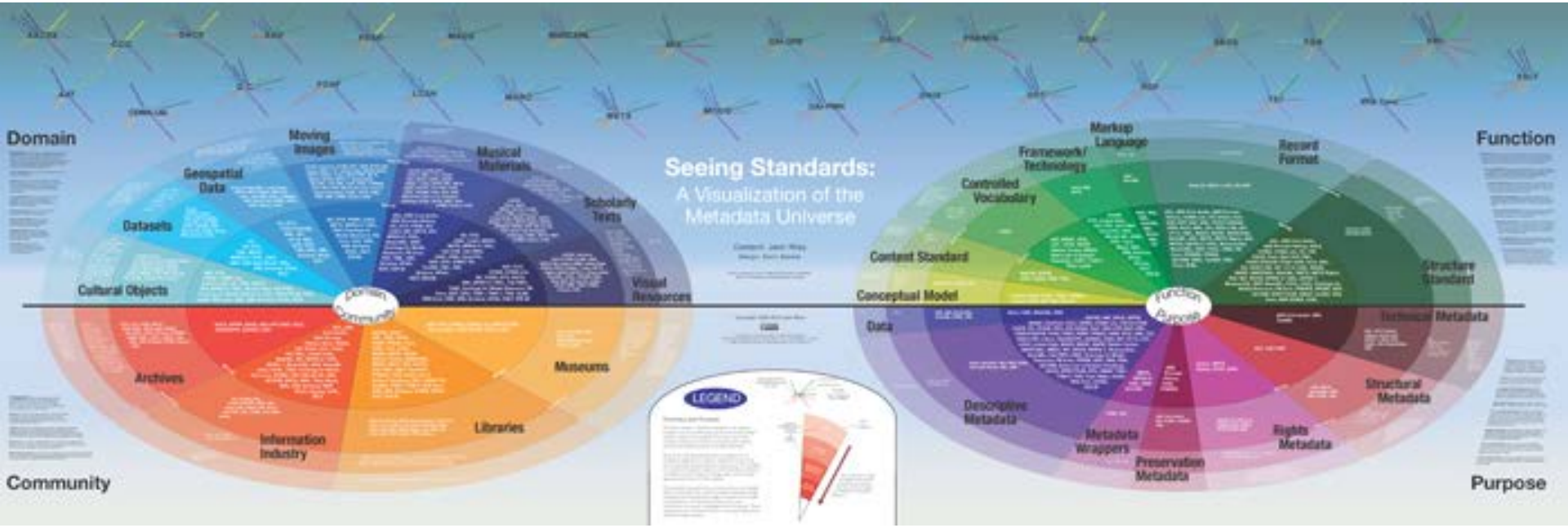

With
Amazing
push-button
Shushing
Action!
plus
BONUS
Trading Card
& Bookmarks

but the modern library is just that… modern

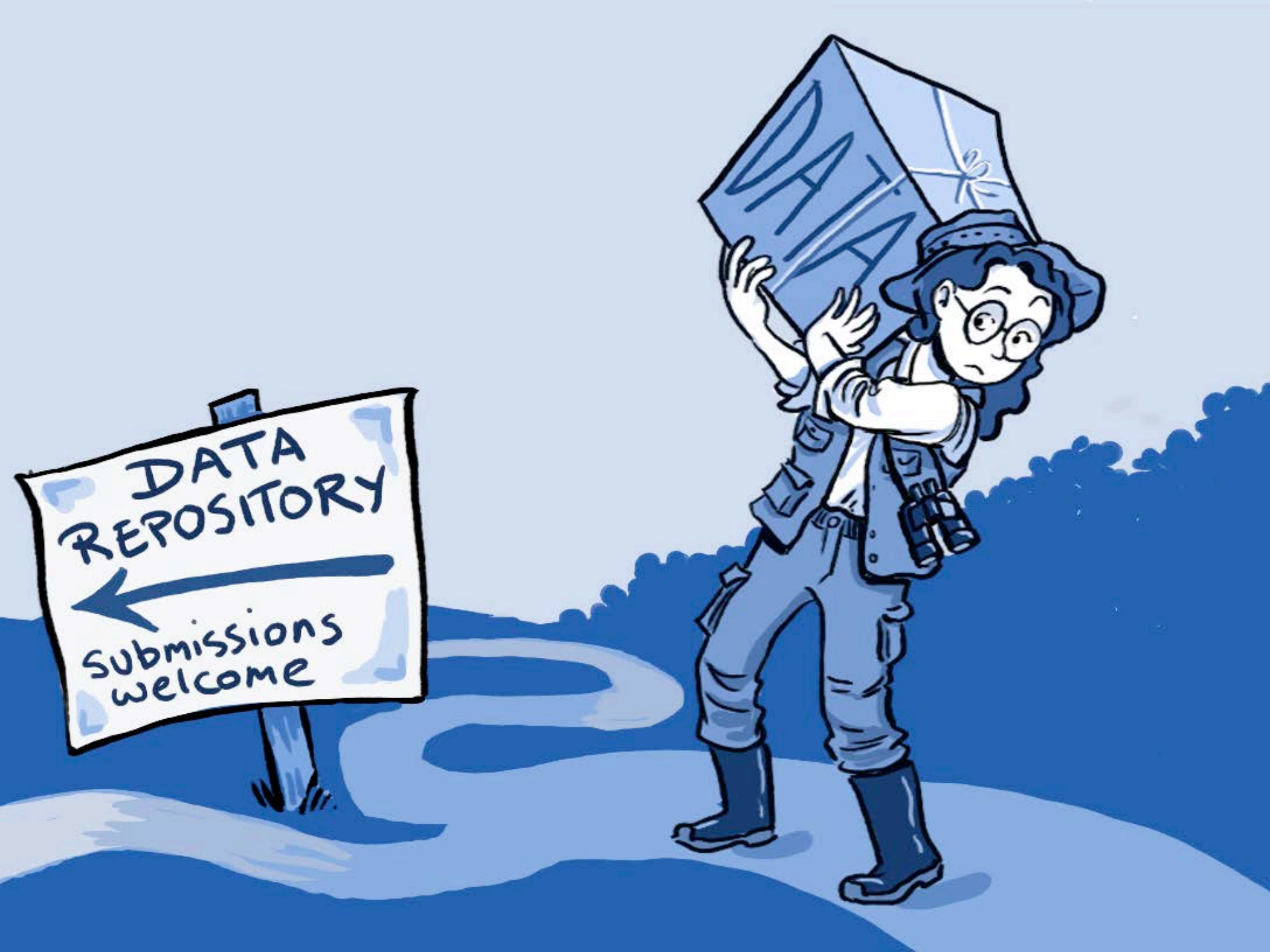
technology

user experience

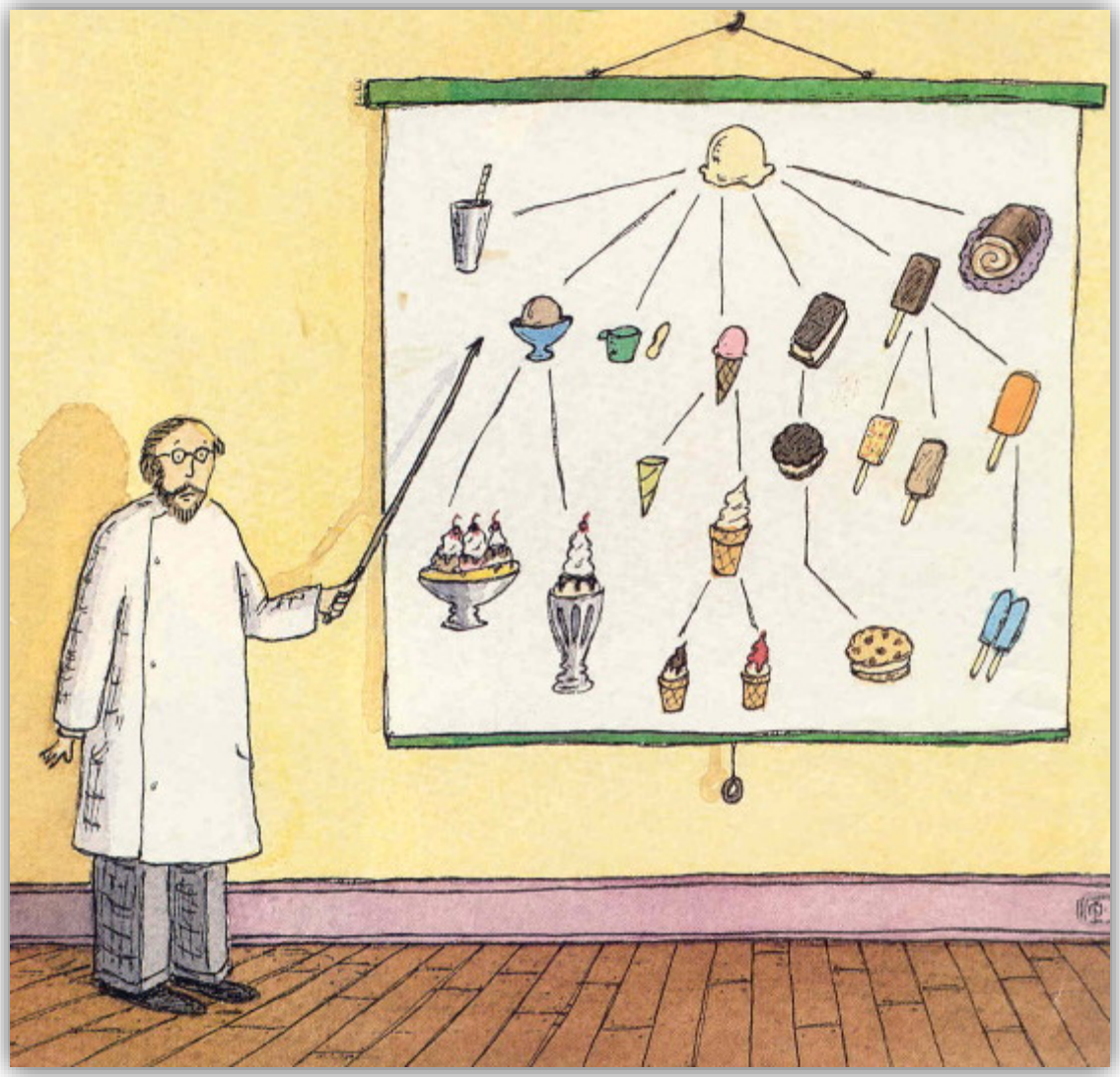
digital collection &
metadata gurus

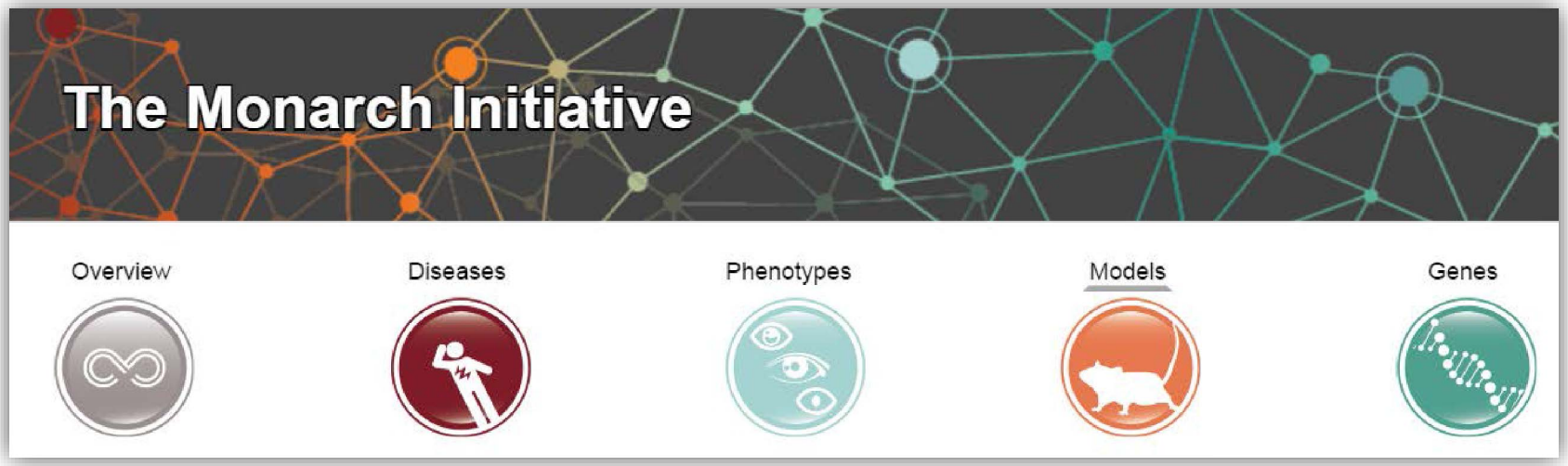

Seeing Standards:
A Visualization of the Metadata Universe
Domain
Function
Community
Purpose
Moving Images
Musical Materials
Geospatial Data
Scholarly Texts
Datasets
Visual Resources
Cultural Objects
Archives
Museums
Libraries
Information Industry
Markup Language
Framework/ Technology
Record Format
Controlled Vocabulary
Content Standard
Structure Standard
Conceptual Model
Technical Metadata
Data
Structural Metadata
Descriptive Metadata
Rights Metadata
Metadata Wrappers
Preservation Metadata
LEGEND

institutional repositories


DATA
REPOSITORY
Submissions welcome
DATA

ontology development group




The Monarch Initiative
Overview
Diseases
Phenotypes
Models
Genes


FORCE2016
PROGRAM AT A GLANCE
& PASSPORT
Networking
Program
2016
MadLibs
Welcome to PDX
FORCE2016
THE ARMORY • PORTLAND OREGON • APRIL 17 - 19


Resource
Identification
Initiative


PHENOTYPES.
THE FINAL FRONTIER

RDM librarian

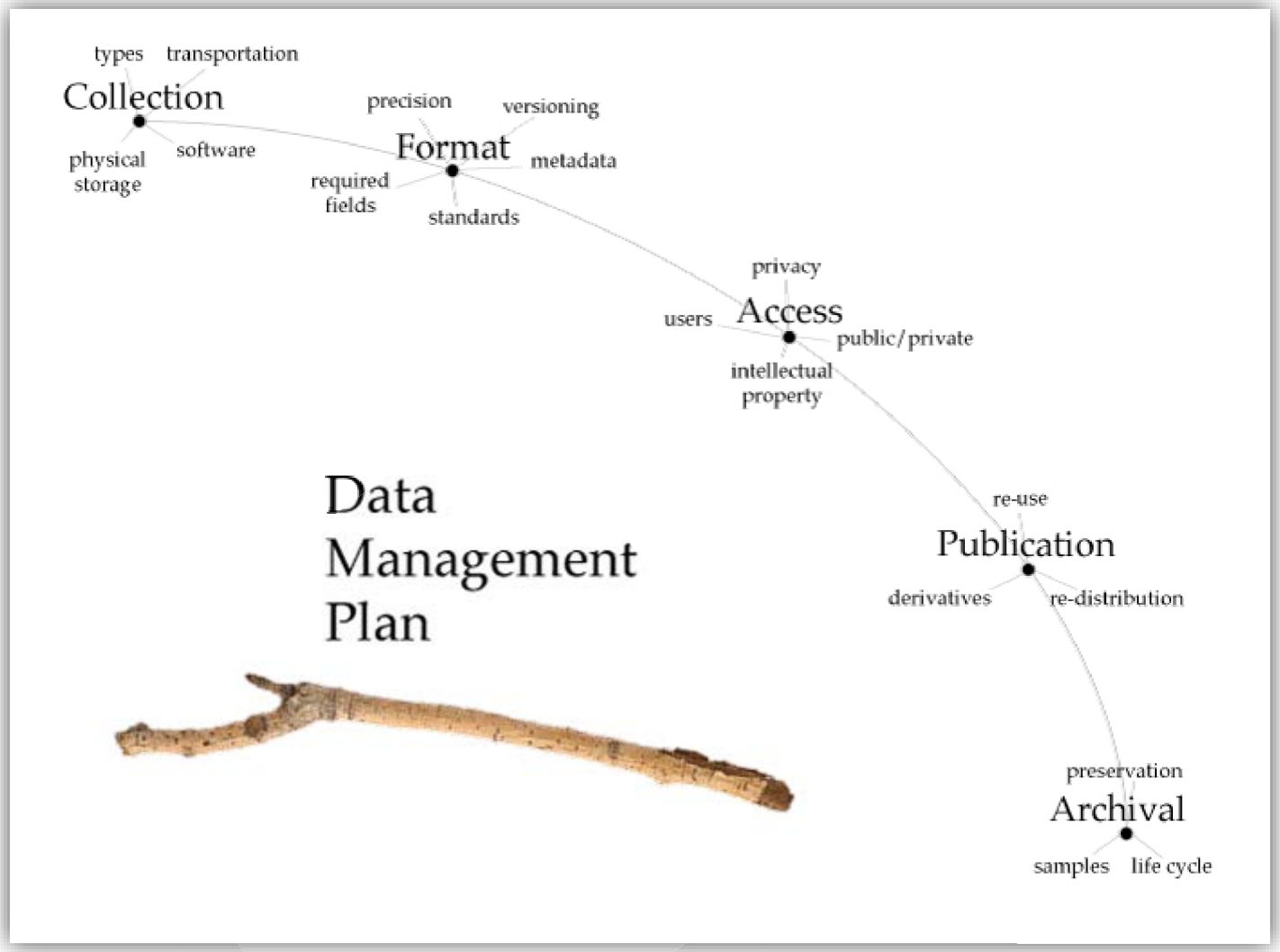
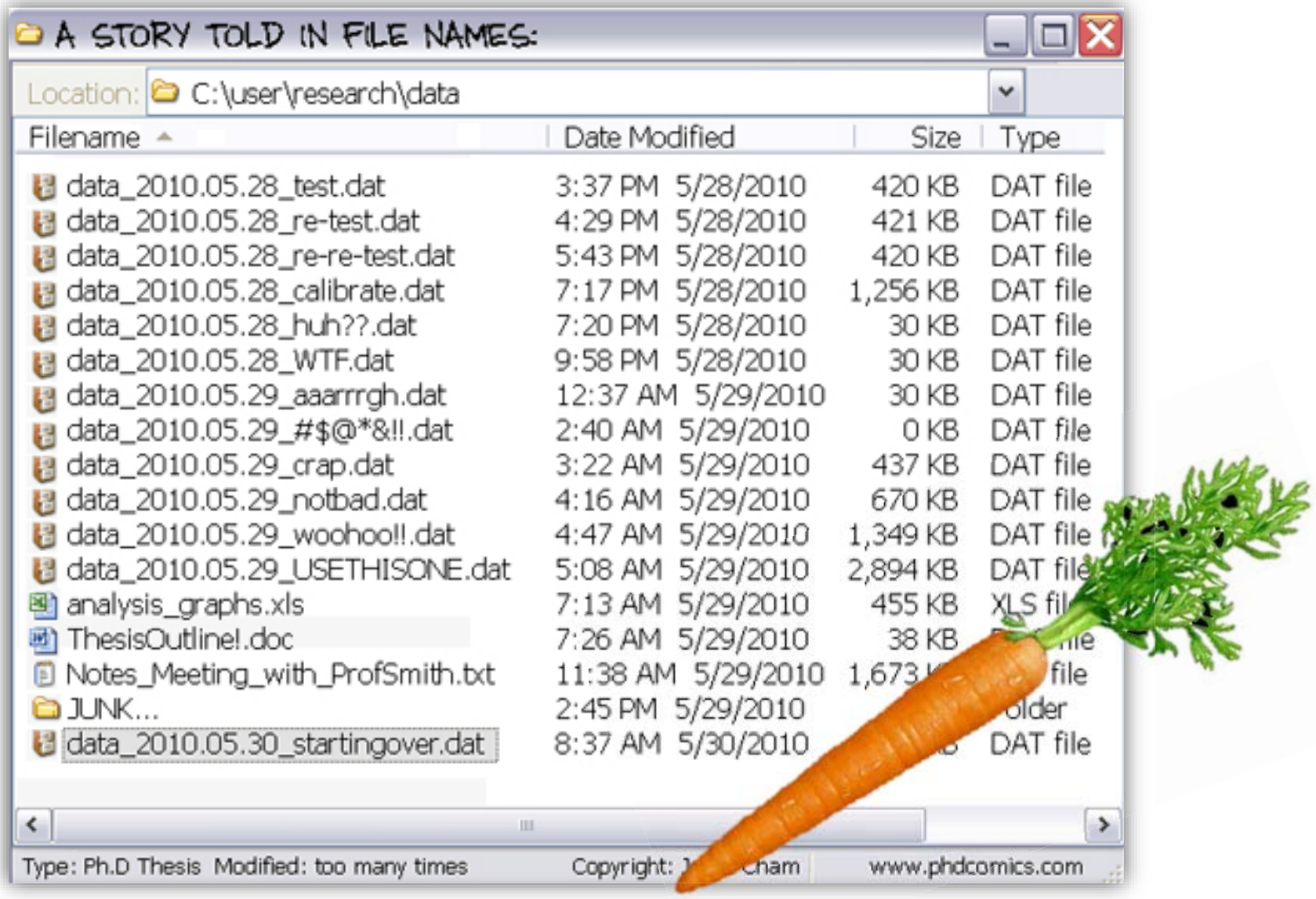
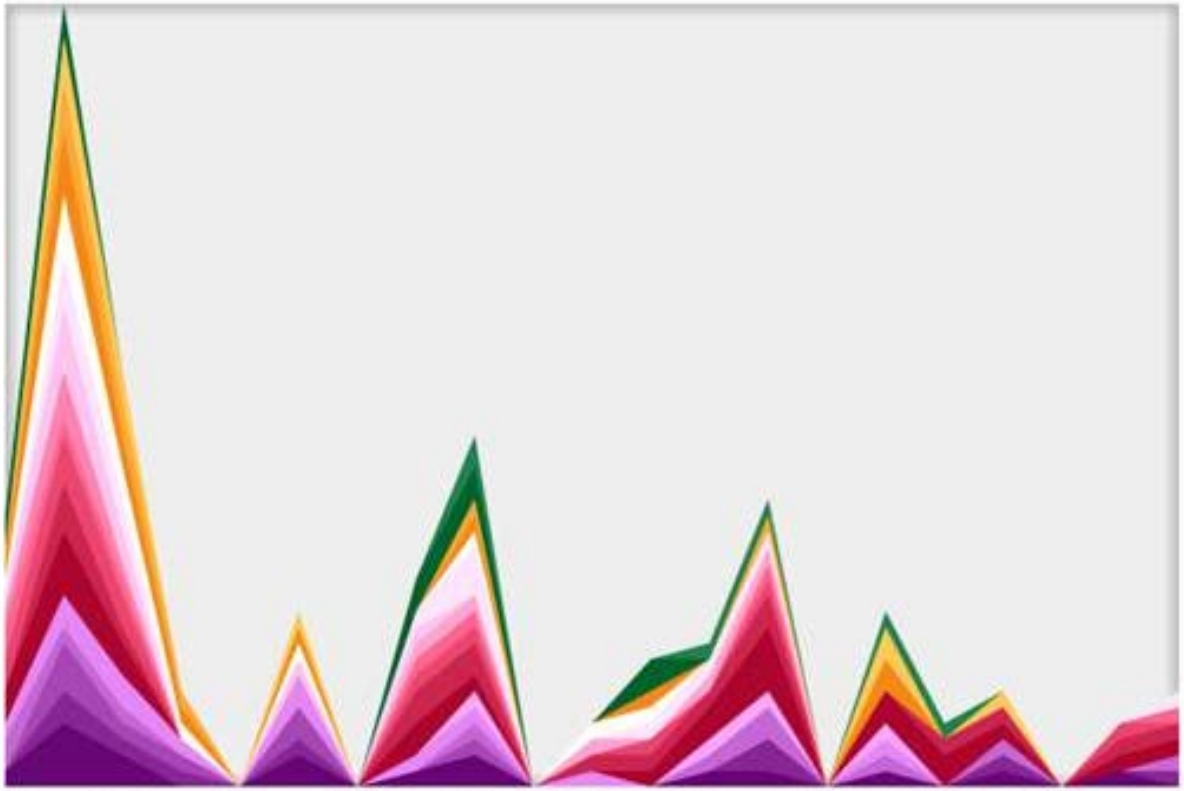


Diagram from Dan LaSota, U Alaska


A STORY TOLD IN FILE NAMES:
Location: C:\user\research\data
Filename
Date Modified
Size
Type
data_2010.05.28_test.dat 3:37 PM 5/28/2010 420 KB DAT file
data_2010.05.28_re-test.dat 4:29 PM 5/28/2010 421 KB DAT file
data_2010.05.28_re-re-test.dat 5:43 PM 5/28/2010 420 KB DAT file
data_2010.05.28_calibrate.dat 7:17 PM 5/28/2010 1,256 KB DAT file
data_2010.05.28_huh??.dat 7:20 PM 5/28/2010 30 KB DAT file
data_2010.05.28_WTF.dat 9:58 PM 5/28/2010 30 KB DAT file
data_2010.05.29_aaarrrgh.dat 12:37 AM 5/29/2010 30 KB DAT file
data_2010.05.29_#$@*&!!.dat 2:40 AM 5/29/2010 0 KB DAT file
data_2010.05.29_crap.dat 3:22 AM 5/29/2010 437 KB DAT file
data_2010.05.29_notbad.dat 4:16 AM 5/29/2010 670 KB DAT file
data_2010.05.29_woohoo!!.dat 4:47 AM 5/29/2010 1,349 KB DAT file
data_2010.05.29_USETHISONE.dat 5:08 AM 5/29/2010 2,894 KB DAT file
analysis_graphs.xls 7:13 AM 5/29/2010 455 KB XLS file
ThesisOutline!.doc 7:26 AM 5/29/2010 38 KB
Notes_Meeting_with_ProfSmith.txt 11:38 AM 5/29/2010
JUNK... 2:45 PM 5/29/2010 File folder
data_2010.05.30_startingover.dat 8:37 AM 5/30/2010 DAT file
Type: Ph.D Thesis Modified: too many times
www.phdcomics.com

research specialist
(scholarly communications)



Timeline Filter

1988 — 2008

Chemicals & Drugs

- DNA
- DNA-Binding Proteins
- Muscle Proteins
- Nuclear Proteins
- MyoD Protein
- Proto-Oncogene Proteins c-mdm2

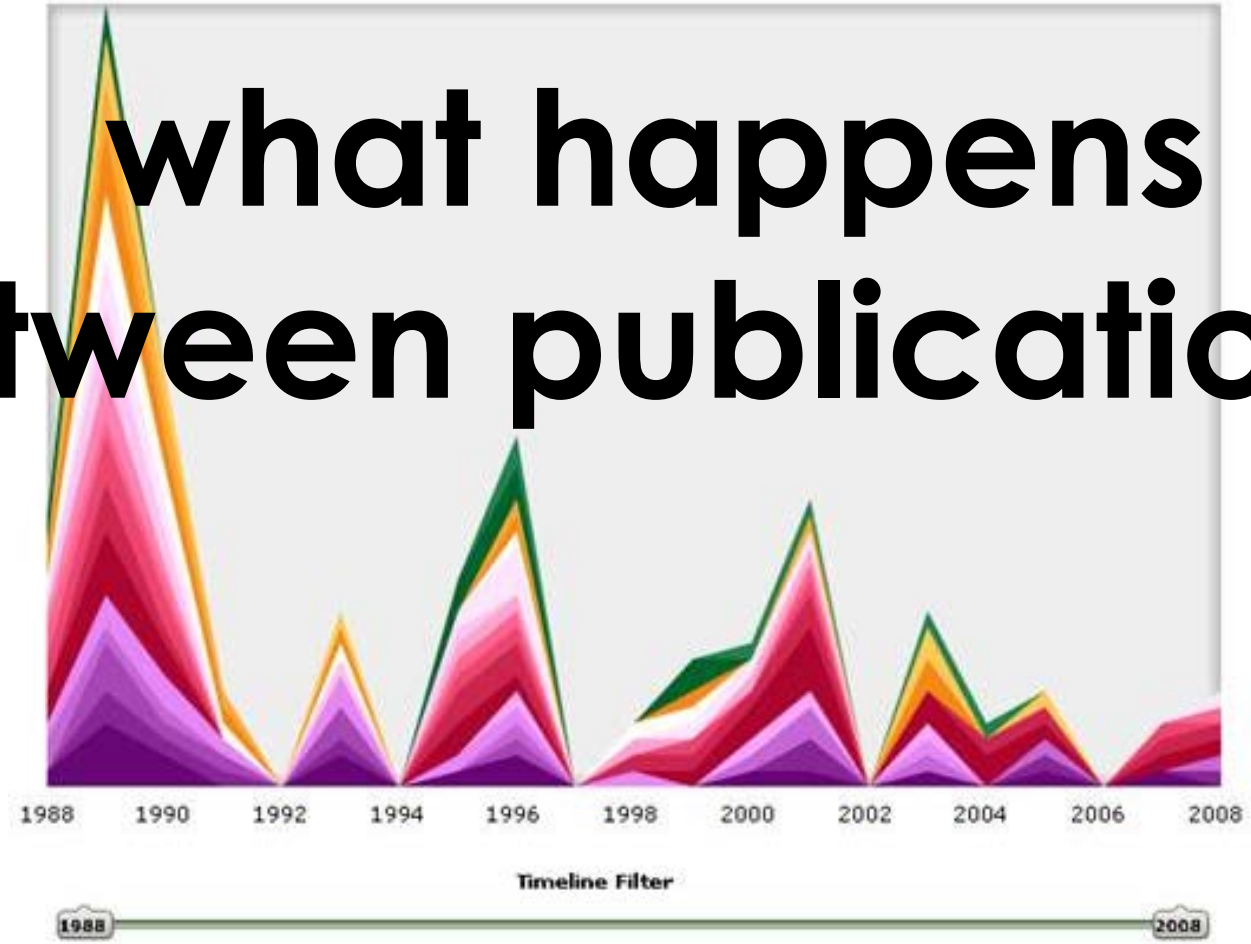
Anatomy

- Cell Line
- Chromosomes
- Human Chromosomes
- Chromosomes, Human, Pair 11
- Chromosomes, Human, Pair 17
- Chromosomes, Human, Pair 3
- Fibroblasts

Physiology

- Cell Differentiation
- Gene Expression Regulation
- Transfection

what happens between publications?



- Policy documents
- News
- Blogs
- Twitter
- Post-publication peer-reviews
- Facebook
- Sina Weibo
- Wikipedia
- Google+
- LinkedIn
- Reddit
- Faculty1000
- Q&A (stack overflow)
- Youtube
- Pinterest

Nature wants my data… Now what?

5 Things You Need to Know About Open Science and Open Data

Robin Champieux, MLIS
Danielle Robinson, NGP
Daniela Saderi, NGP
Jackie Wirz, PhD

Open Insight 2016

Facilitating Conversations and Building a Community Around Open Science

Robin Champieux, MLIS | Erin Foster, MLIS | Danielle Robinson | Daniela Saderi | Jackie Wirz, PhD

subject specialist
(that’s me!)

STAND BACK

I'M GOING TO TRY

SCIENCE

From the most excellent xkcd.com

STAND BACK

I'M GOING TO TRY

LIBRARY SCIENCE

Modified from the most excellent xkcd.com

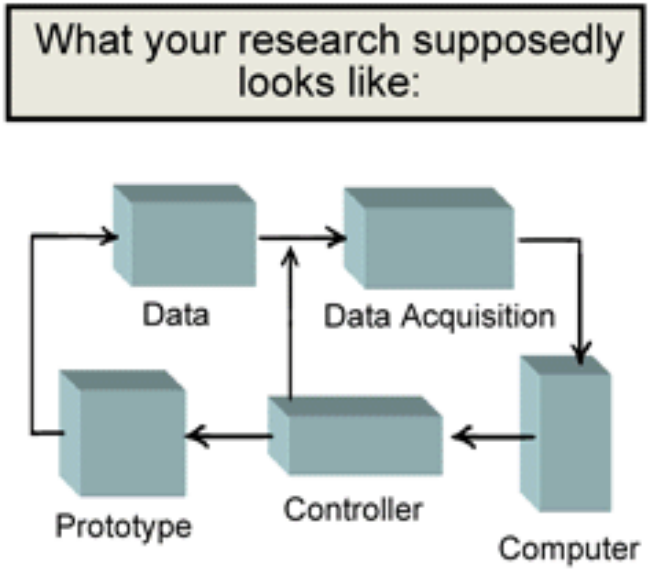


Figure 1. Experimental Diagram

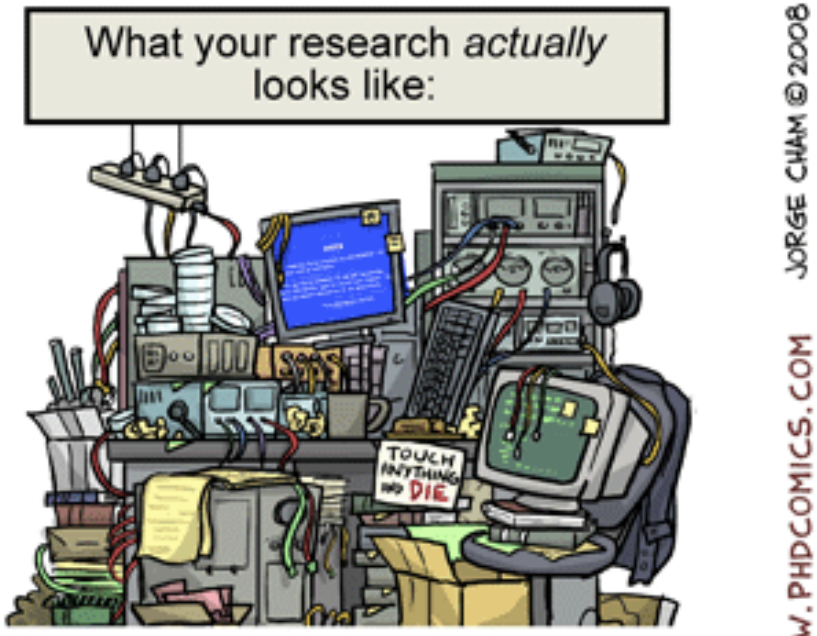


Figure 2. Experimental Mess

RESEARCH WEEK

Developing Novel Data Services / Data Viz Outreach Tool

CONJ 610: Fundamentals of Data Visualization

Fall 2014, Thursdays at 1:30

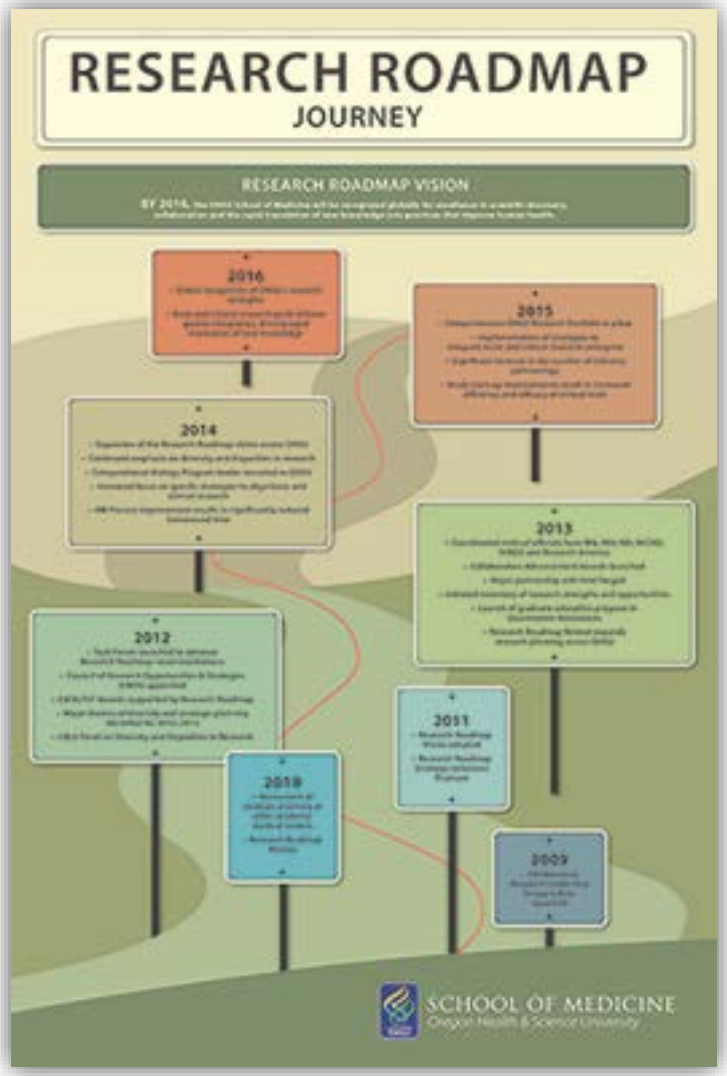
Synopsis
Instructors
Textbook
Schedule
Resources
Access

Synopsis

Data visualization is very interesting and nifty. The simple act of attending this class is guaranteed to enhance your evolutionary fitness.

More seriously, this course is designed to give students a foundation in the principles of data visualization, particularly as applied to scientific and technical data. In large part, the specific details that we cover will be determined by the interests and backgrounds of the students.

As this is a "nano-course", grading will be based on class participation and on turning in completed assignments. There will also be a final group project.

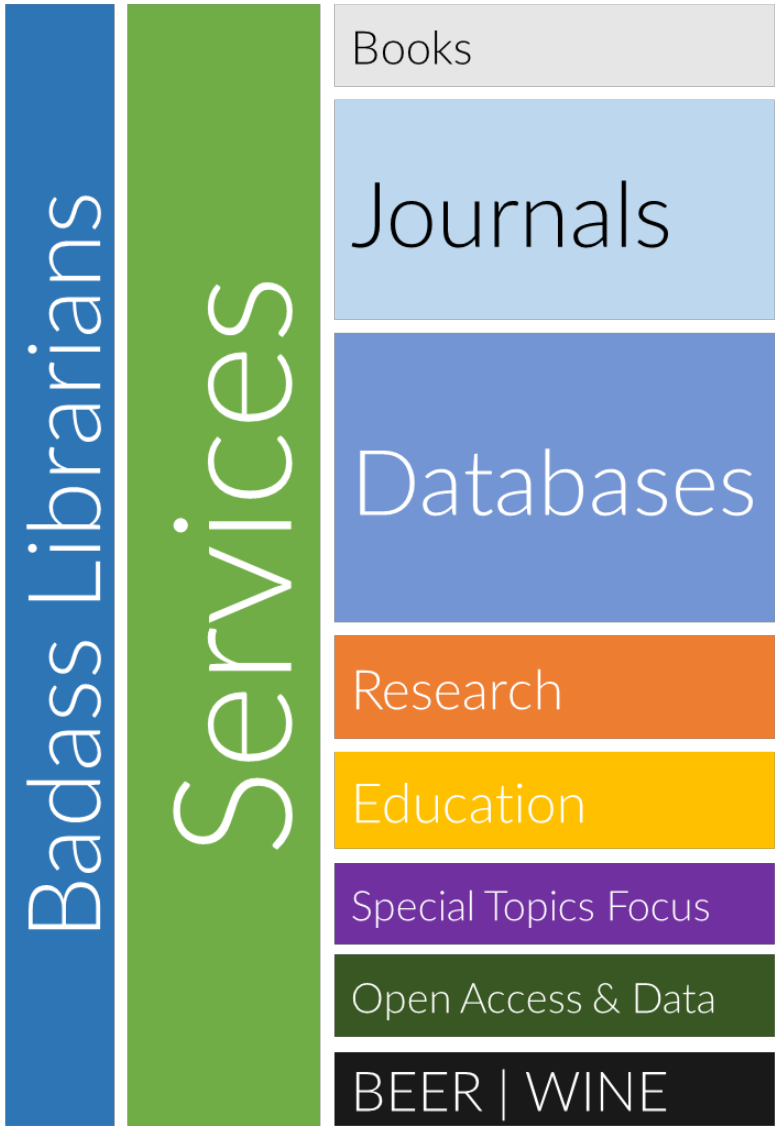


Big Data 2 Knowledge

Data Science for the people, by the people, tailored for a custom fit

Jackie Wirz, PhD | Oregon Health & Science University

a data discussion
a fugue in 4 parts
now with unicorns!


Badass Librarians
Services
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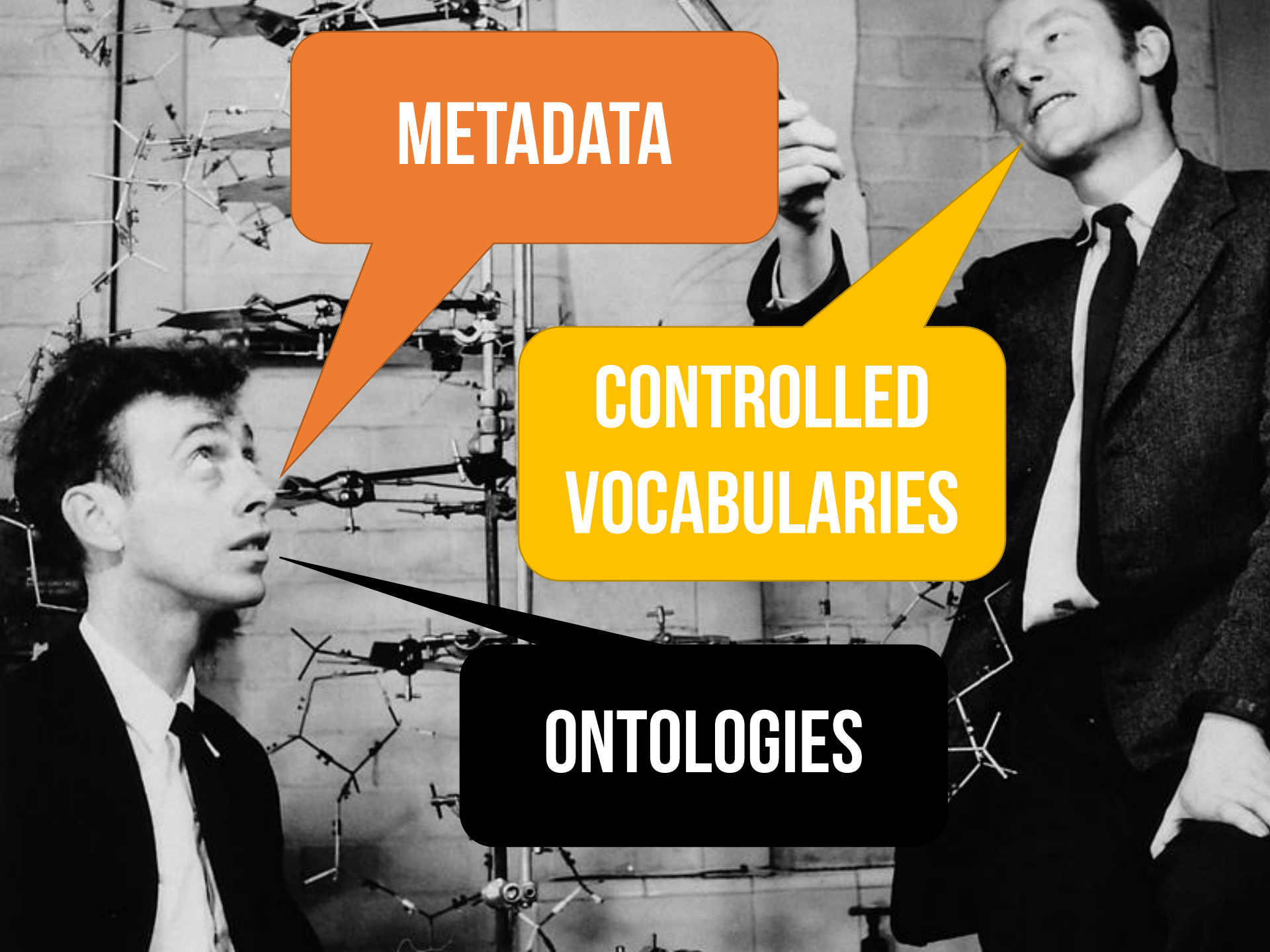
Journals
Databases
Research
Education
Special Topics Focus
Open Access & Data
BEER | WINE


Data Data Data Data
Clean & Organize Data
Analyzing data
Idea!
Design
Other People's Data
Try #2
Failure!!
BEER | WINE
#896!!!!
Seminar | JC | Reading
Badass Conferences
Publish | Store | Share

data means different things
to different people:
describe, document, metadata


watson @crick It's a double helix! sck it, @pauling !!!!!
5:15 PM Feb 28th 1953 from TweaglePub.com
@watson @crick You guys both suck…
5:17 PM Feb 28th 1953
You speak for your data

How do you speak for your data when you are not around?


METADATA
CONTROLLED VOCABULARIES
ONTOLOGIES

diverse data does not spontaneously assemble:
curate, standardize, share

meet the Urban lab

Primary Antibodies:

Antibody Target	Ok?	Rec'd	Manufacturer	Stock Number	Species	Diluted 2:1?	Storage	State	Final Concentation	Incubation Time	Unmasking?	Notes
BrdU (for IdU)	✓	3/23/12	BD Biosystems	347580	mouse	no	4C	Liquid	1:50	overnight	Acid Wash	Use secondary at 1:300 for best detection.
BrdU or CldU	✓	0/0/2010	Serotec	MCA2060	rat	no	4C	Liquid	1:1000	1 hr	Acid Wash	
Calbindin	✓	1/11/08	Chemicon	AB1778	rabbit	no	-20C	Frozen Aliquots	1:1000	1 hr		
Calretinin (N-18)	✓	8/15/06	Santa Cruz	SC-11644	goat	no	4C	Liquid	1:1500	1 hr		
CamKII		6/2/05	Affinity Bioreagents	MA1-048	mouse	no	-20C	Frozen Aliquots	nd	nd		
Caspase-3	✓	10/19/04	Cell Signaling Technology	9661	rabbit	no	-20C	Liquid	1:250	overnight		
cFos		3/26/03	Genosys	OA-11-824A	sheep	yes	-20C	Liquid	nd	nd		
c-Fos (Ab-3)		10/29/09	Calbiochem	OP53	mouse	no	-20C	Liquid	1:1000	1 hr		
cFos (Ab-5)	✓	2/24/11	Calbiochem	PC38	rabbit	no	-20C	Frozen Aliquots	1:1000/1:5000	1 hr/overnight		
Connexin 43		unk	Invitrogen (Zymed)	71-0700	rabbit	no	-20C	Frozen Aliquots	1:500?	1 hr?		
doc2b		4/1/10	NeuroMab/Antibodies, Inc.	73-214	mouse	no	4C	Liquid	nd	nd		Ascites fluid
doc2b	✓	5/1/10	Novus Biologicals	NBP1-03473	rabbit	no	-20C	Frozen Aliquots	1:25	1 hr		Use DNAse1 for BrdU labeling(?)
Doublecortin (C-18)	✓	8/15/06	Santa Cruz	SC-8066	goat	no	4C	Liquid	1:250	1 hr		
EGR-1 (S-25)		10/29/09	Santa Cruz	SC-101033	mouse	no	4C	Liquid	1:2000	1 hr		
EGR-1 (C-19)	✓	2/24/11	Santa Cruz	SC-189	rabbit	no	4C	Liquid	1:500	1 hr		
Frequenin (NCS-1)		1/11/05	Chemicon	AB5906	Chicken	no	-20C	Frozen Aliquots	nd	nd		
GABA	✓	6/22/06	Chemicon	AB175	Guinea Pig	no	-20C	Frozen Aliquots	1:2000	1 hr		
GABA	✓	4/23/09	Sigma (Preferred)	A0310	mouse	no	-20C	Frozen Aliquots	1:2000	1 hr		
GAP-43	✓	4/1/08	Sigma	G9264	mouse	no	-20C	Frozen Aliquots	1:16000	overnight		
GFAP	✓	8/7/12	Abcam	ab7260	rabbit	no	4C	Liquid	1:1000	1 hr		
GFAP	✓	9/1/06	Promega	G5601	rabbit	no	4C	Liquid	1:1000	1 hr		
GFP	✓	3/5/13	Abcam	ab6673	goat	no	4C	Liquid	1:10000	1 hr		
GFP		4/08	Chemicon (for EM)	AB3080	rabbit	no	-20C	Frozen Aliquots	1:600	overnight		
GFP	✓	5/3/12	Molecular Probes (Preferred)	A11122	rabbit	no	4C	Liquid	1:1000	1 hr		
Growth Cone		5/6/08	Serotec	MCA-1712	mouse	no	4C	Liquid	1:500 or 1:1000	1 hr		
HCN1		3/9/11	NeuroMab/Antibodies, Inc.	75-110	mouse	no	-20C	Frozen Aliquots	1:100	1 hr	Pepsin	
HCN2	✓	9/12/12	Alomone Labs	APC-030	rabbit	no	4C	Liquid	1:500	1 hr	Pepsin?	Titrated in p9, older animals probably need pepsin unmaski
HCN2		12/20/10	NeuroMab/Antibodies, Inc.	75-111	mouse	no	-20C	Frozen Aliquots	nd	nd		GML18, p9--no labeling with pepsin digestion.
HCN3		12/20/10	NeuroMab/Antibodies, Inc.	75-175	mouse	no	-20C	Frozen Aliquots	nd	nd		
HCN4		12/20/10	NeuroMab/Antibodies, Inc.	75-150	mouse	no	-20C	Frozen Aliquots	1:50	1 hr	Pepsin	
HCN4		8/9/11	Abcam	ab69054	rabbit	no	-20C	Frozen Aliquots	nd	nd	Pepsin	
HSV-1	✓	2/26/07	Dako	B0114	rabbit	no	4C	Liquid	1:10000	2-3 days		
Ki67	✓	11/12/08	Abcam	ab15580	rabbit	no	4C	Liquid	1:1000	1 hr		
Kv1.1	✓	10/28/09	NeuroMab/Antibodies, Inc.	75-007	mouse	no	-20C	Frozen Aliquots	1:1000	1 hr	Pepsin	
Kv1.2		3/9/11	NeuroMab/Antibodies, Inc.	75-008	mouse	no	-20C	Frozen Aliquots	1:1000	1 hr	Pepsin	
Kv1.2		8/23/11	Abcam	ab55987	rabbit	no	-20C	Frozen Aliquots	nd	nd	Pepsin	GML19, pp1-5--no labeling with FL or DAB
Kv1.2	✓	10/16/12	Santa Cruz	SC-11188	goat	no	4C	Liquid	1:50	overnight	Pepsin?	Titrated in p9, older animals probably need pepsin unmasking. La
Kv1.3		3/9/11	NeuroMab/Antibodies, Inc.	75-009	mouse	no	-20C	Frozen Aliquots	1:1000	1 hr	Pepsin	
Kv3.1b		7/1/11	NeuroMab/Antibodies, Inc.	75-041	mouse	no	-20C	Frozen Aliquots	nd	nd	nd	
Kv3.2	✓	9/9/11	Abcam	ab101787	rabbit	no	-20C	Frozen Aliquots	1:1000	overnight	Pepsin	Better labeling than Santa Cruz.
Kv3.2 (L-14)	✓	6/21/11	Santa Cruz	SC-54394	goat	no	4C	Liquid	1:100	overnight	Pepsin	
Kv3.3		6/23/11	Abnova	H00003748-M01	mouse	no	-20C	Frozen Aliquots	nd	nd	nd	
Kv4.2		4/8/11	NeuroMab/Antibodies, Inc.	75-016	mouse	no	-20C	Frozen Aliquots	1:250	1 hr	Pepsin	
Kv4.2 (C-20)	✓	6/16/10	Santa Cruz	sc-11683	goat	no	4C	Liquid	1:250/1:2500	1 hr/overnight	Pepsin	
Map2	✓	5/13/08	Abcam	ab11267	mouse	no	-20C	Frozen Aliquots	1:4000	1 hr		Use 2% TX-100 during permeabilization for good Map2 penet
mGluR1a	✓	10/07	Abcam	ab6439	rabbit	no	-20C	Liquid	1:1000	1 hr		

A+ for organization of their antibodies!

“Bax antibody (santa cruz)”

Bax Antibodies

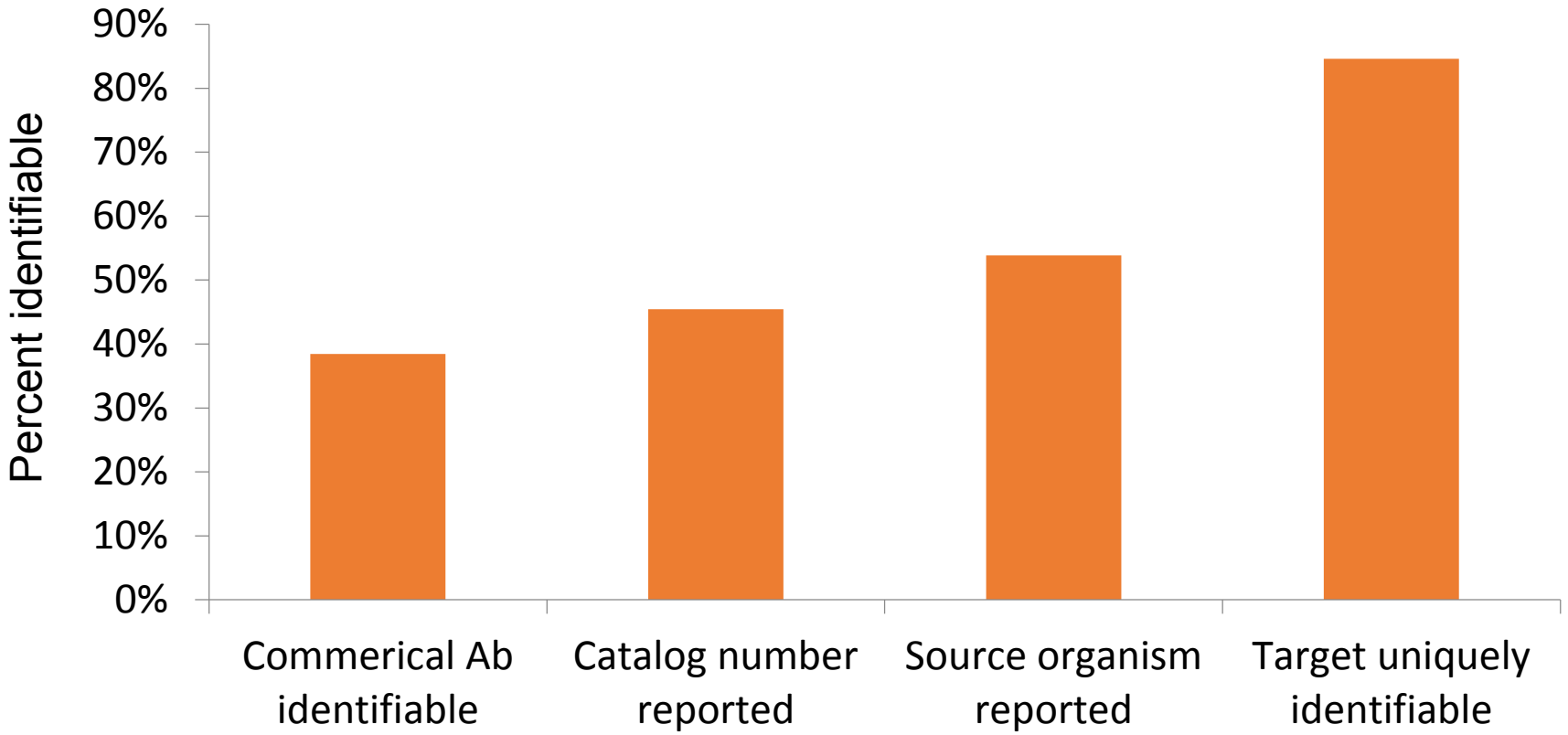
Santa Cruz Biotechnology, Inc. offers a broad range of Bax antibodies. Select Bax antibodies from several monoclonal and/or polyclonal Bax antibodies listed below. View detailed Bax antibody specifications by linking to the specific product blocks. Select appropriate Bax antibodies for your research by isotype, epitope, applications and species reactivity. Bax gene silencer products in siRNA, shRNA Plasmid, shRNA Lentiviral Particle, CRISPR/Cas9 Knockout and CRISPR Double Nickase Plasmid formats are also available as well as CRISPR/dCas9 Activation Plasmids and CRISPR Lenti Activation Systems for gene activation.

Introducing HOVERcruz™, a unique system for rapid identification of Bax Antibodies. Hover over the icon next to the product names in the table to see representative data for that product. **Live chat is now available! (click here)** Our live chat system is available to answer your product and ordering questions.

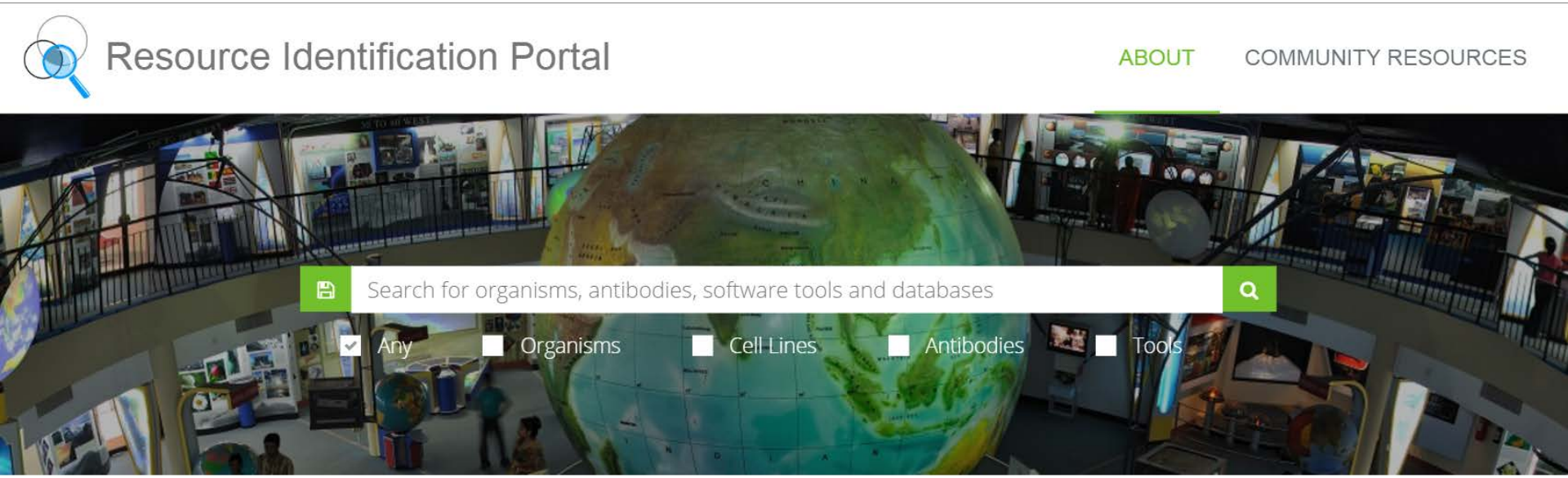
See chemical Bax Activators for functional analysis of cellular responses to Bax.

Also see additional Bax Antibodies including, Bax beta

PRODUCT NAME	CAT. #	ISOTYPE	EPITOPE	APPLICATIONS	SPECIES	CITATIONS	RATING
Bax (2D2)	sc-20067	mouse IgG_1	3-16 (h)	WB, IP, IF, IHC(P), FCM	human	69	★★★★★
Bax (Δ 21)	sc-6236	rabbit IgG	1-171 (m)	WB, IP, IF, IHC(P), ELISA	m, r, h, c, b, p	62	★★★★★
Bax (6A7)	sc-23959	mouse IgG_1	N-terminal (h)	WB, IP	m, r, h	58	★★★★★
Bax (B-9)	sc-7480	mouse IgG_{2b}	1-171 (m)	WB, IP, IF, IHC(P), FCM	m, r, h	222	★★★★★
Bax (N-20)	sc-493	rabbit IgG	N-terminal (h)	WB, IP, IF, ELISA	m, r, h, e, c, b, p	625	★★★★★
Bax (P-19)	sc-526	rabbit IgG	N-terminal (m)	WB, IP, IF, IHC(P), ELISA	m, r, h, c, b, p	280	★★★★★
Bax (YTH6A7)	sc-80658	mouse IgG_1	clone 5B7	WB, IP	m, r, h	2	★★★★☆
Bax (6D149)	sc-70405	mouse IgG_1	3-16 (h)	WB, IP, FCM	human	2	★★☆☆☆
Bax (4H32)	sc-70407	mouse IgG_1	N-terminal (h)	WB, IP	m, r, h	9	★★★★★
Bax (6D150)	sc-70408	mouse IgG_1	N-terminal (h)	WB, IP	m, r, h	9	★★★★★
Bax (SPM336)	sc-65532	mouse IgG_1	3-16 (h)	WB, IP, IF, IHC(P)	human	5	★★★★★
Baxβ (K-17)	sc-20287	goat IgG	internal (h)	WB, IF, ELISA	human		★★☆☆☆
Baxβ (S-18)	sc-20288	goat IgG	C-terminal (h)	WB, IF, ELISA	human		★★☆☆☆



Of 14 antibodies in 45 articles, only **38%** were identifiable


Resource Identification Portal
ABOUT
COMMUNITY RESOURCES
Search for organisms, antibodies, software tools and databases
Any
Organisms
Cell Lines
Antibodies
Tools

data is fluid:
workflow, organization


Sweet
Gummy Bears
Teach Data

there's a whole lot of data:
the only way to survive
is to be or work with a unicorn


let‘s do this!

case study
education

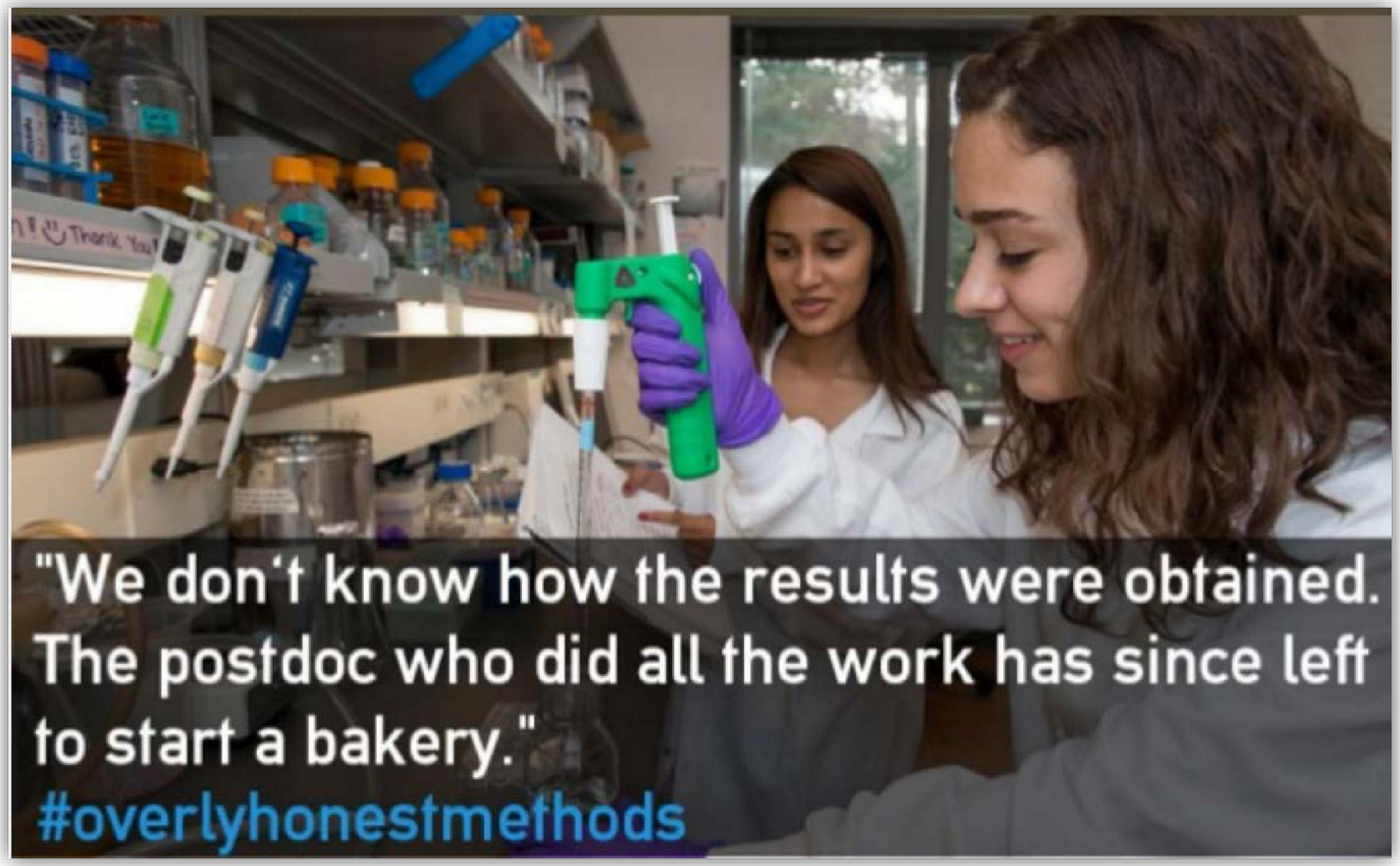

DISPOSAL SAFE


What does this prepare you for?

WHAT I LEARNED IN GRAD SCHOOL:

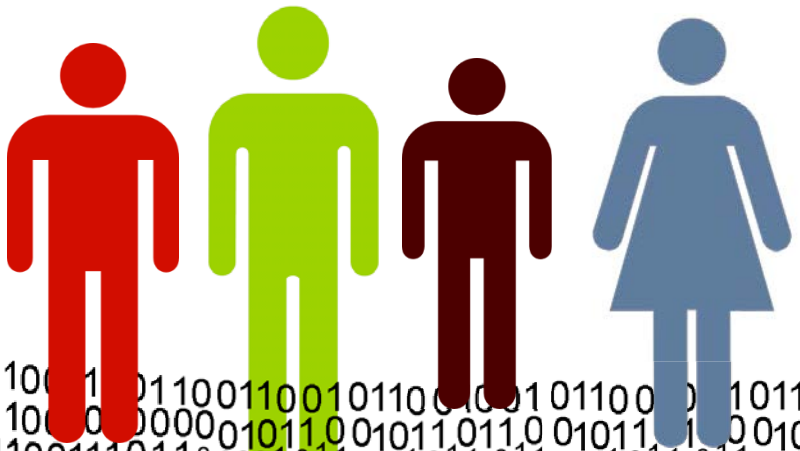

WHAT I LEARNED IN GRAD SCHOOL:
· POWERPOINT
· HOW TO WRITE
· BULLET ITEM
· LISTS
· HOW TO GIVE A 1 HOUR PRESENTATION ON ANY TOPIC (EVEN PROCRASTINATION)


What does this *not*
prepare you for?


"We don't know how the results were obtained. The postdoc who did all the work has since left to start a bakery."
#overlyhonestmethods

data literacy

2014
1k Challenge




2015
Gummy Workshop Required

2016
Data and Donuts Required

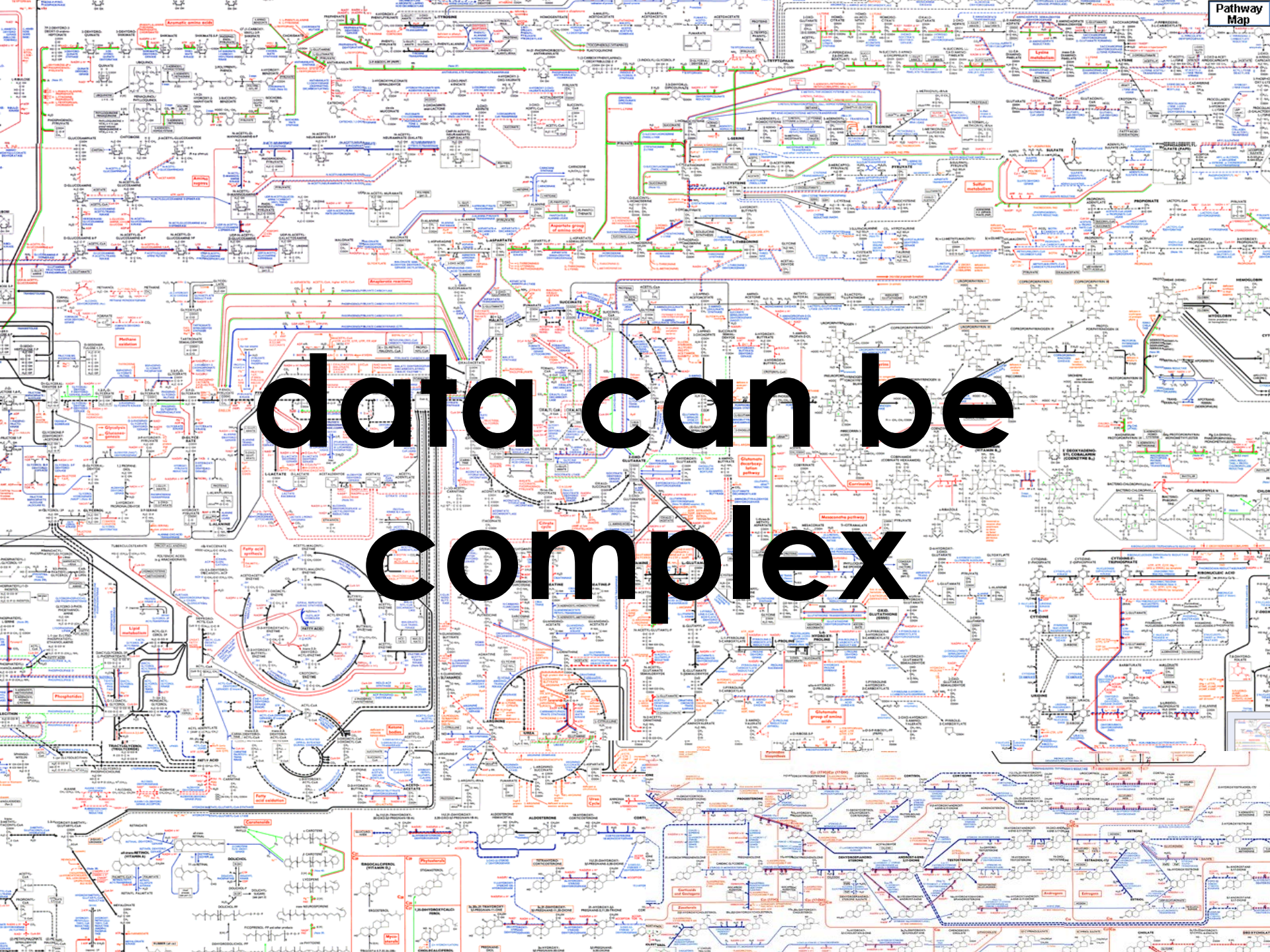
2017
creativeIDEAS

2018
Interdisciplinary Data Certificate

THE FUTURE:
a data-literate culture

whew

i'm exhausted!


Pathway Map
data can be complex

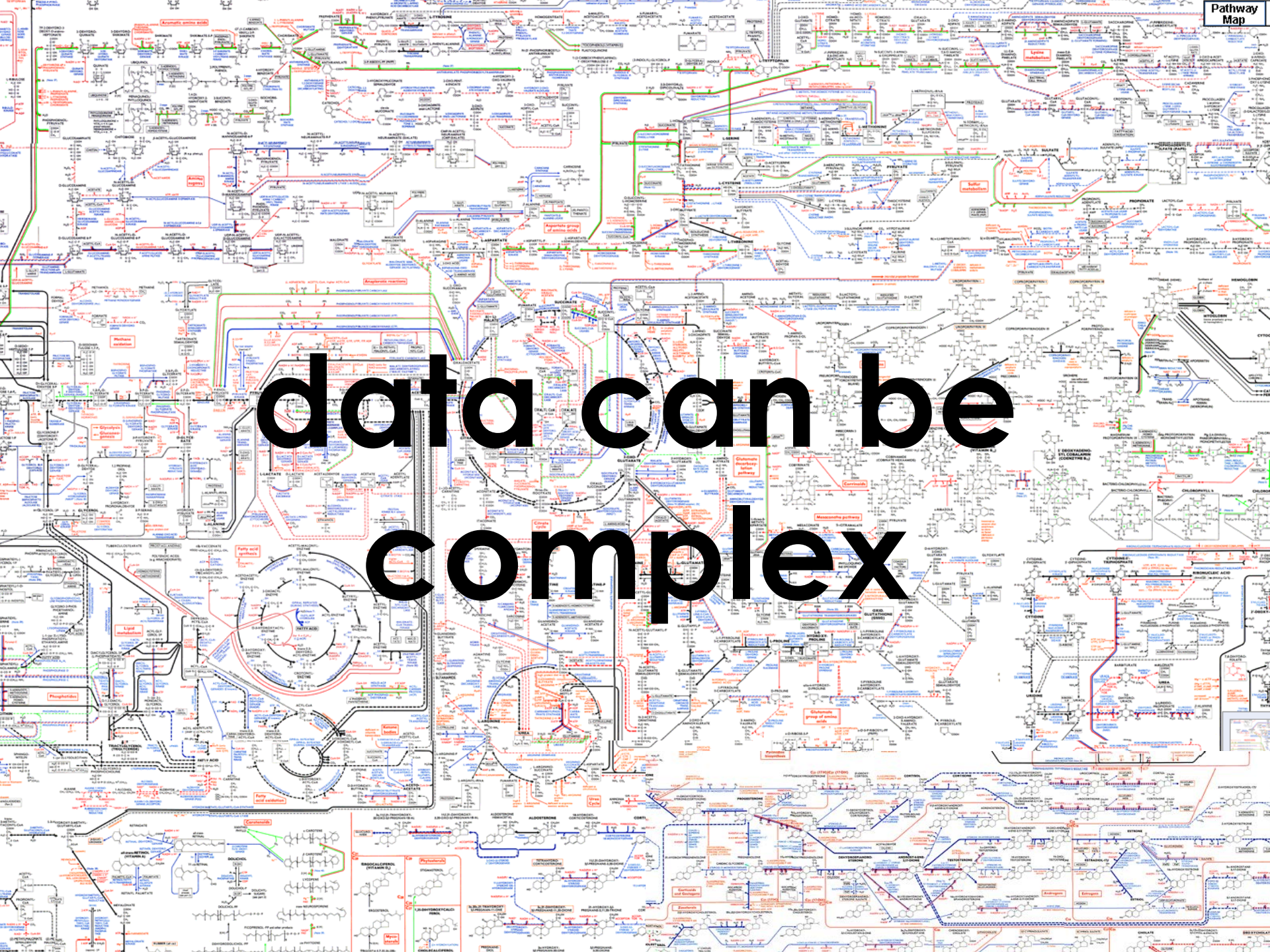

data can be
amazing


data can be
messy


data is all
about
discovery


libraries are
about
discovery


data + library =


Pathway Map
data can be complex


Pathway Map
unicorns can help you with that

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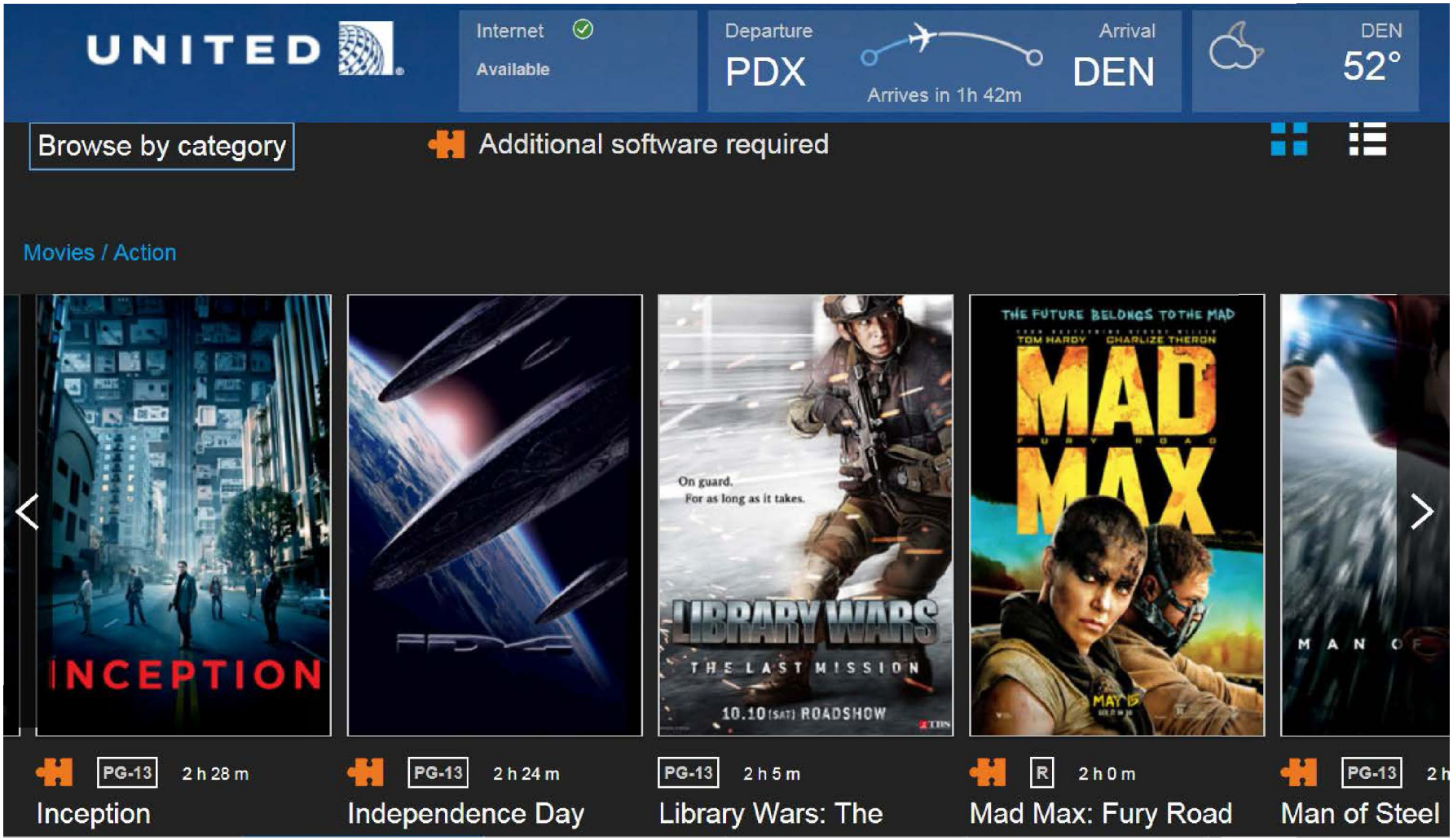

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