SEPTEMBER 10, 2020

Digital Scholarship for a Post-crisis Tomorrow: Digital Acceleration and the Role of the Library

Keith Webster

Dean of University Libraries and Director of Emerging and Integrative Media Initiatives

Carnegie Mellon University

@cmkeithw

Events

CNI Membership Meetings

CNI Workshops

- Digital Scholarship Planning 2020 Webinar Series
  - The Case for Developing Digital Scholarship Programs
  - Supporting Digital Scholarship During the Pandemic: What's Possible
  - Assessment: Needs and Ongoing
  - Staffing
  - Supporting Research
  - Initiatives in Teaching & Learning
  - Diversity, Equity, and Inclusion
  - Space and Place
  - Reflections on Libraries and Digital Scholarship and Looking Ahead
- Planning a Digital Scholarship Center 2016
- Security and Privacy
- Digital Scholarship Centers 2014
- Management of Scholarly Identity

Events Co-Sponsored by CNI

Event Calendar

Digital Scholarship Planning 2020 Webinar Series

Description

In this webinar series, participants will learn about models and best practices related to planning and support for digital scholarship. The webinar series is designed both for those in the beginning of a planning process and for those from institutions seeking to take their program, services, and expertise to the next level. The focus will be on programs administered or jointly administered by the institution's library. The series will utilize a broad conception of digital scholarship, encompassing support for the humanities, arts, social sciences, and sciences. CNI's Associate Executive Director *Emerita*, Joan Lippincott, will host and moderate each session. Additional resources including links to suggested resources and brief campus discussion guides will be provided.

This series builds on the work that CNI and its member institutions have done around the theme of digital scholarship planning. CNI has co-hosted and co-planned 4 workshops on this theme, issued a number of reports, published articles, and hosted project briefings at in-person and virtual membership meetings.

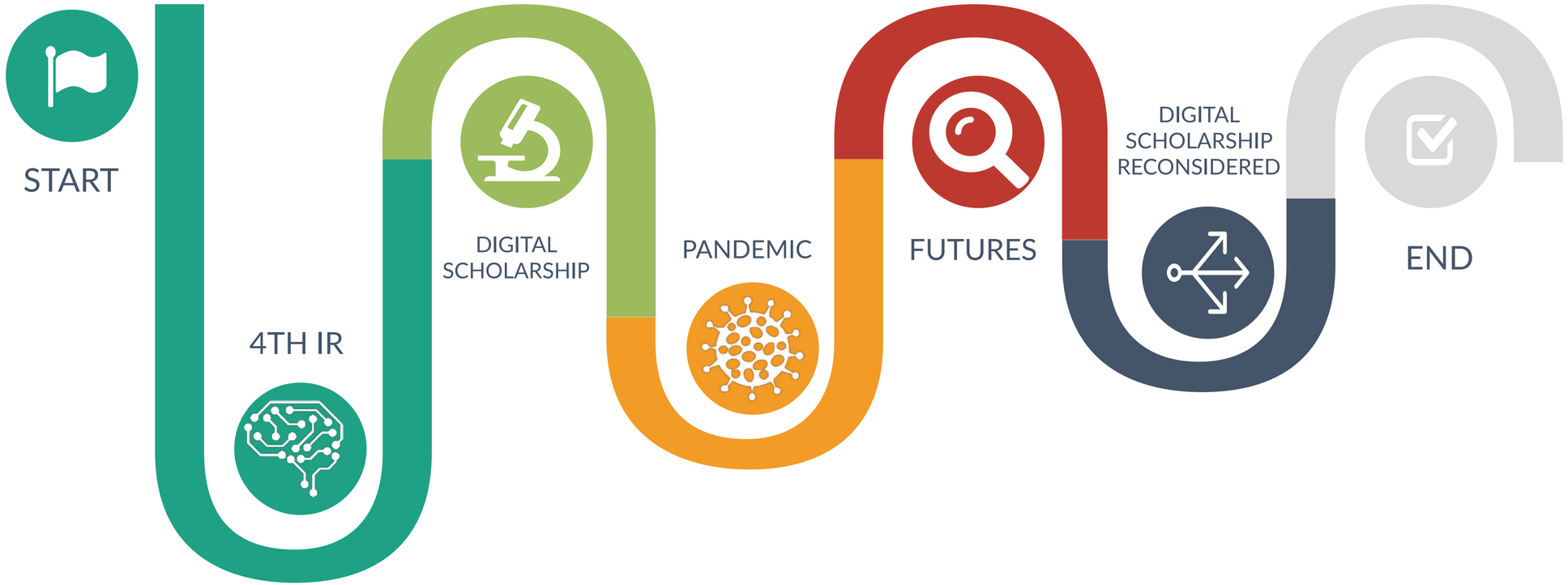
Schedule and Topics

All sessions will be one hour from 1:00 – 2:00 PM Eastern Time.

- Thursday, September 10: The Case for Developing Digital Scholarship Programs
- Tuesday, September 15: Supporting Digital Scholarship During the Pandemic: What's Possible
- Thursday, September 17: Assessment: Needs and Ongoing
- Tuesday, September 22: Staffing
- Thursday, September 24: Supporting Research
- Tuesday, September 29: Initiatives in Teaching & Learning
- Thursday, October 1: Diversity, Equity, & Inclusion
- Tuesday, October 6: Space and Place
- *Note: No webinar on Thursday, October 8*
- Tuesday, October 13: Reflections on Libraries and Digital Scholarship and Looking Ahead

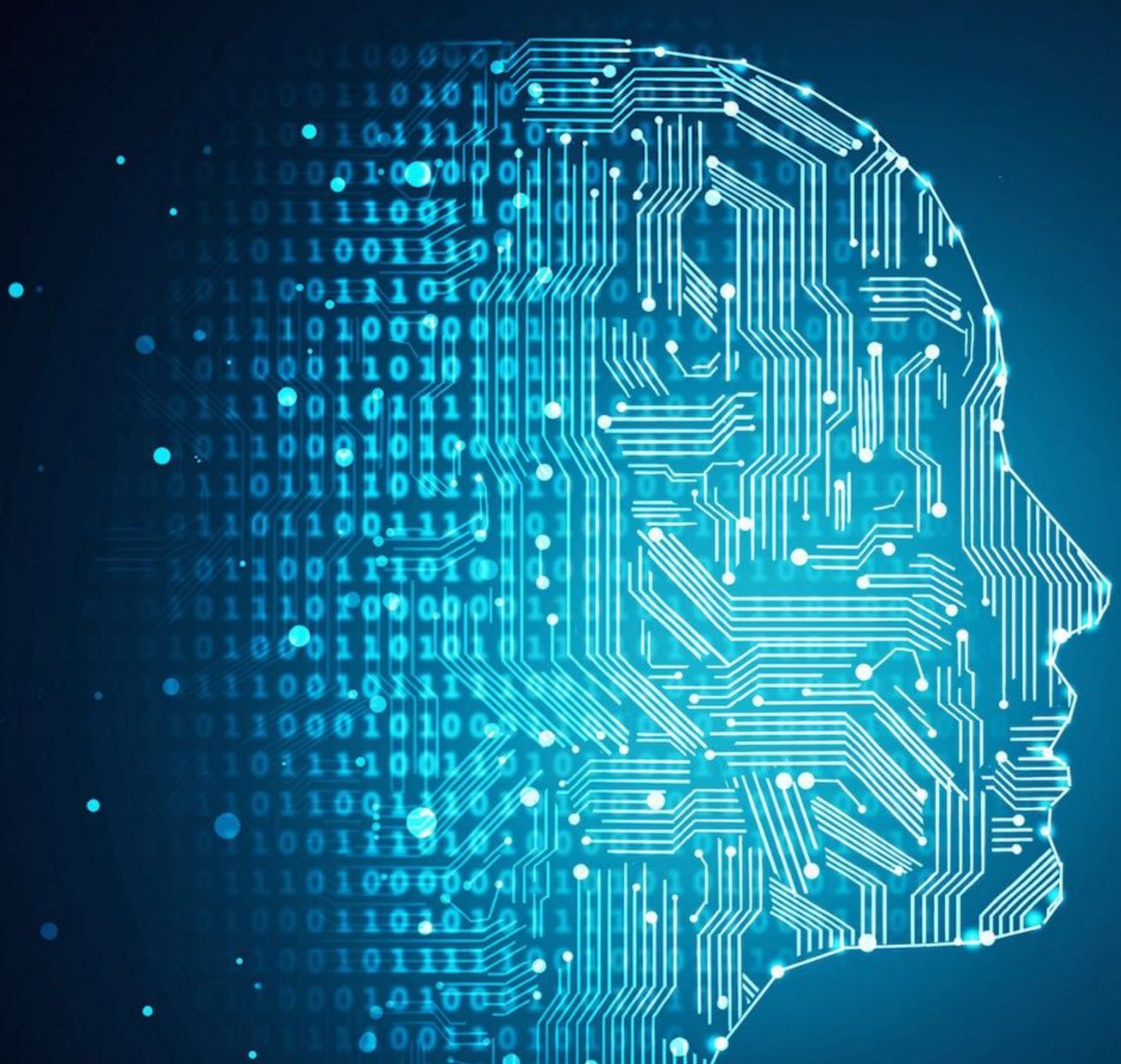
Road Map

The future of libraries and the role of the evolving scholarly record

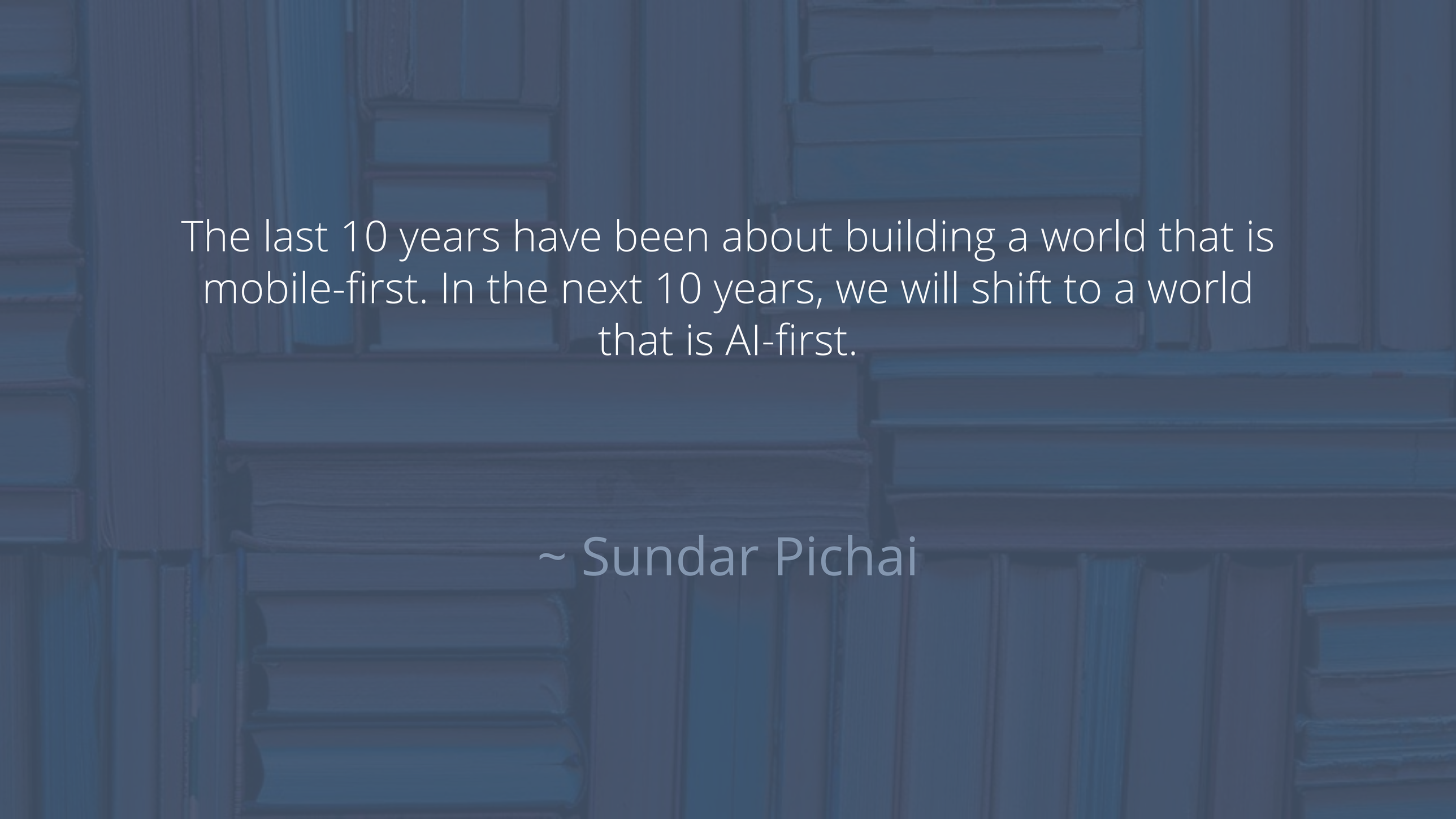


tl;dl

- Digital scholarship can be deeply engaged in the technologies of the fourth industrial revolution
- Resourcing is a challenge, as much to date has relied on project funding
- COVID-19 has prompted a reset in organizations that might be extended to digital scholarship - reprioritizing budgets and leveraging growth of technology adoption
- We need to engage with the future as the worlds we envisage and actions we take now will shape how we emerge
- How does digital scholarship emerge from COVID-19 - how do we enable sustainable services and programs?



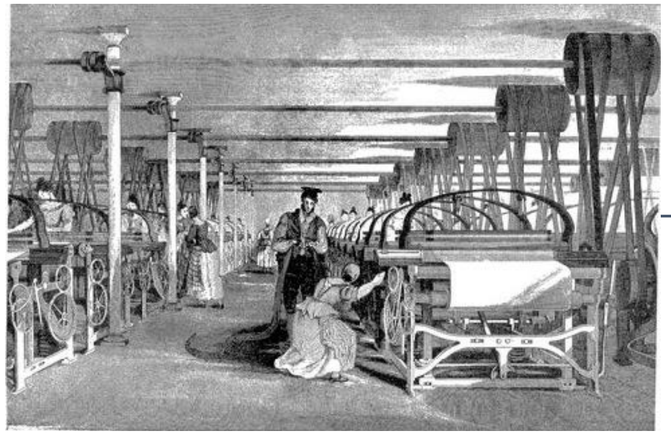
THE FOURTH INDUSTRIAL REVOLUTION


The last 10 years have been about building a world that is mobile-first. In the next 10 years, we will shift to a world that is AI-first.
~ Sundar Pichai

The Industrial Revolutions

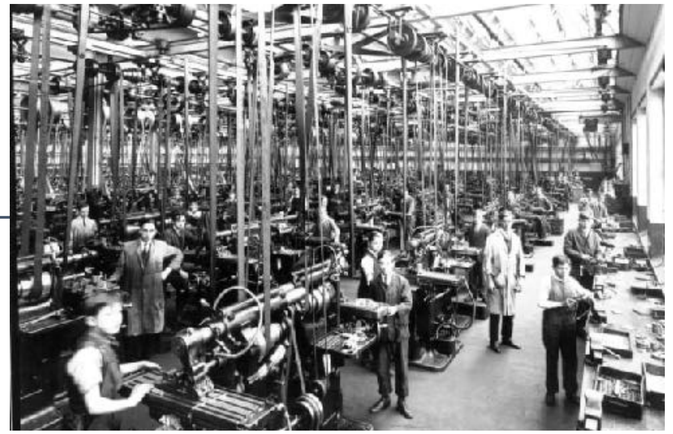
PRE-INDUSTRIAL SOCIETY

1780s



Steam, mechanical production, railroads; leading to electricity, mass production, assembly lines

1870s



1960s

Electronics, computers, automated production

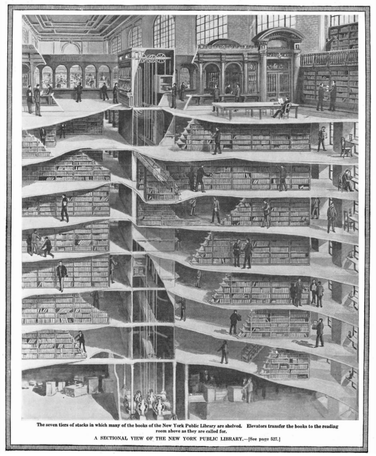
2020s

2010s

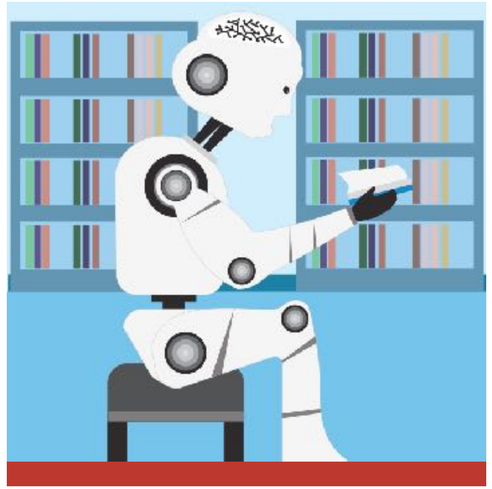
Artificial intelligence, big data, robotics; shifting to focus on sustainability and environment

Libraries and revolutions

Our responses



A SECTIONAL VIEW OF THE NEW YORK PUBLIC LIBRARY.—[See page 525.]



FIRST

SECOND

THIRD

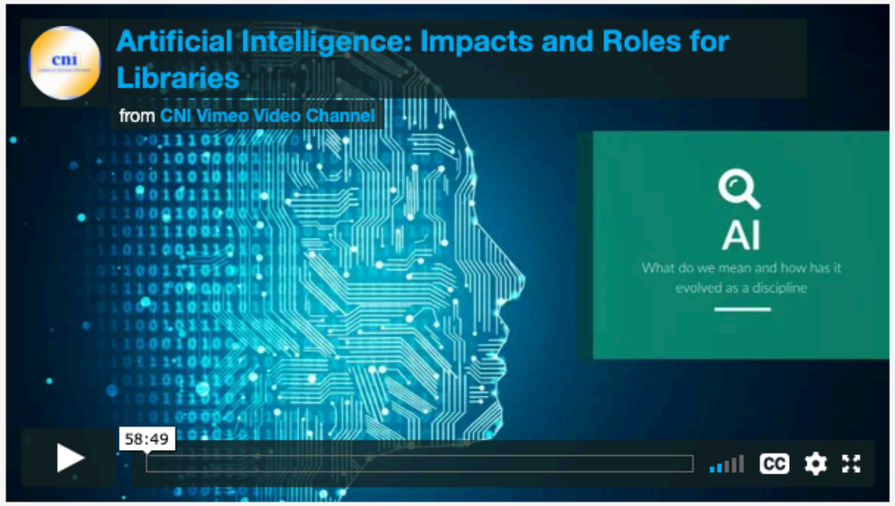
FOURTH

PROVIDER

PARTNER

PIONEER

Artificial Intelligence: Impacts and Roles for Libraries



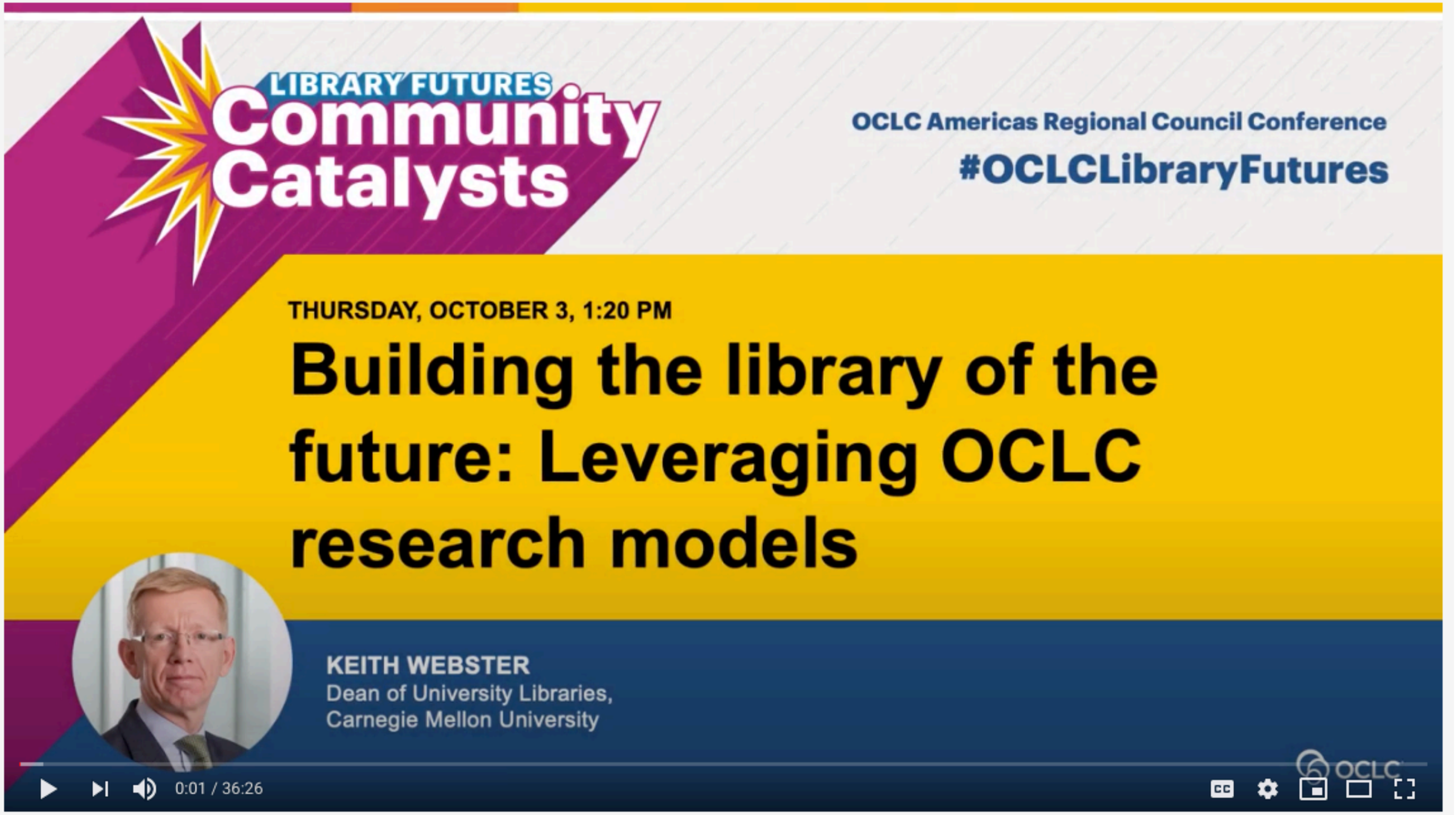
Keith Webster
Dean, University Libraries
Carnegie Mellon University

Jason Griffey
Director of Strategic Initiatives
National Information Standards Organization

Jason Griffey will present on the evolution of artificial intelligence (AI) and potential impacts on libraries, drawing upon his recent book on the topic. Keith Webster will present on the opportunities for libraries to support AI education and research, based on work at Carnegie Mellon, the most prolific AI research institution in the United States. He will also touch on opportunities afforded by AI to advance library priorities.

Presentation (Webster)
Presentation (Griffey)

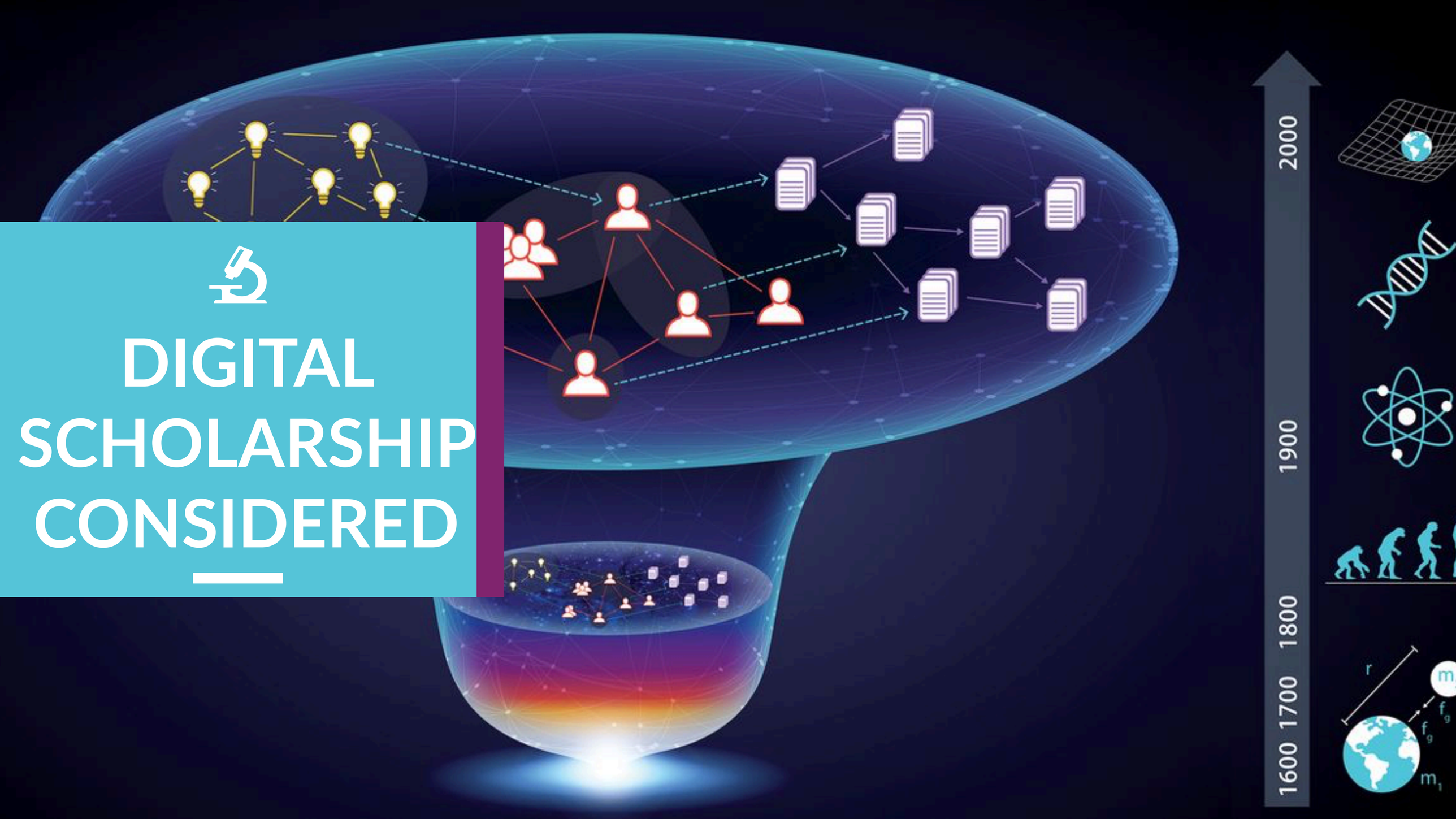
https://www.cni.org/pbs/artificial-intelligence-impacts-and-roles-for-libraries



Library Futures 2019. Keith Webster -- Building the library of the future: leveraging OCLC research

758 views • Oct 25, 2019 12 0 SHARE SAVE

https://youtu.be/aom7pVVuOCQ


DIGITAL
SCHOLARSHIP
CONSIDERED
1600
1700
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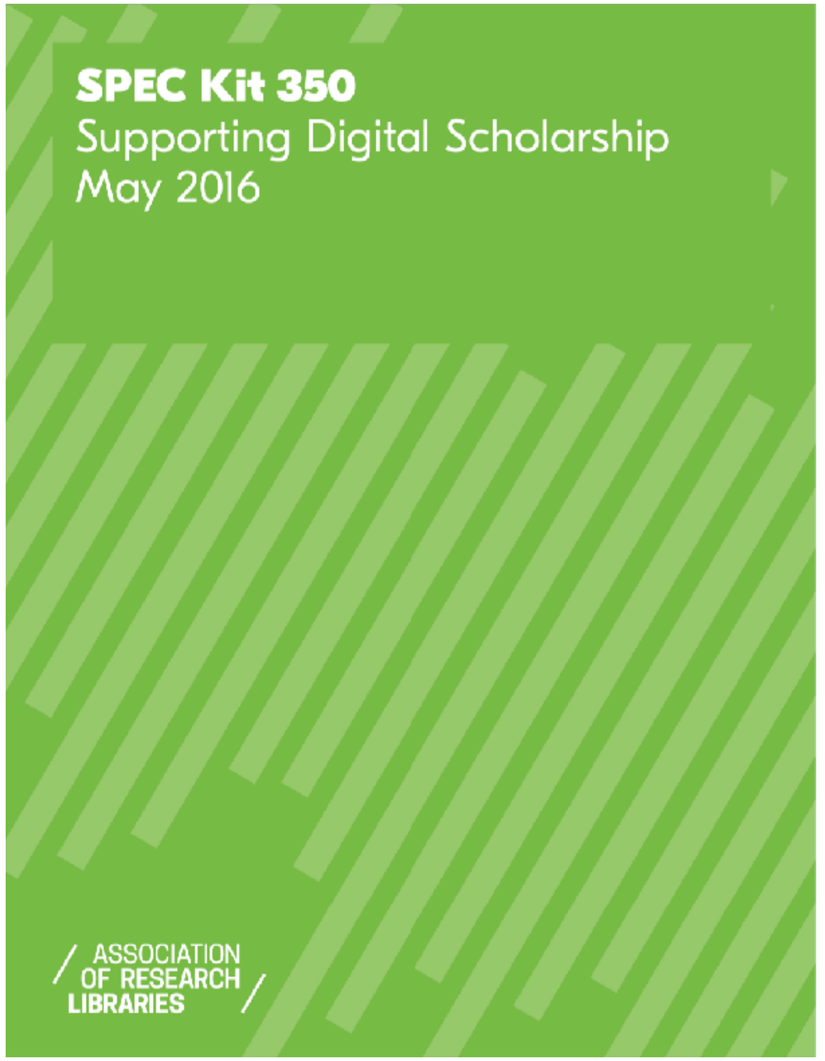
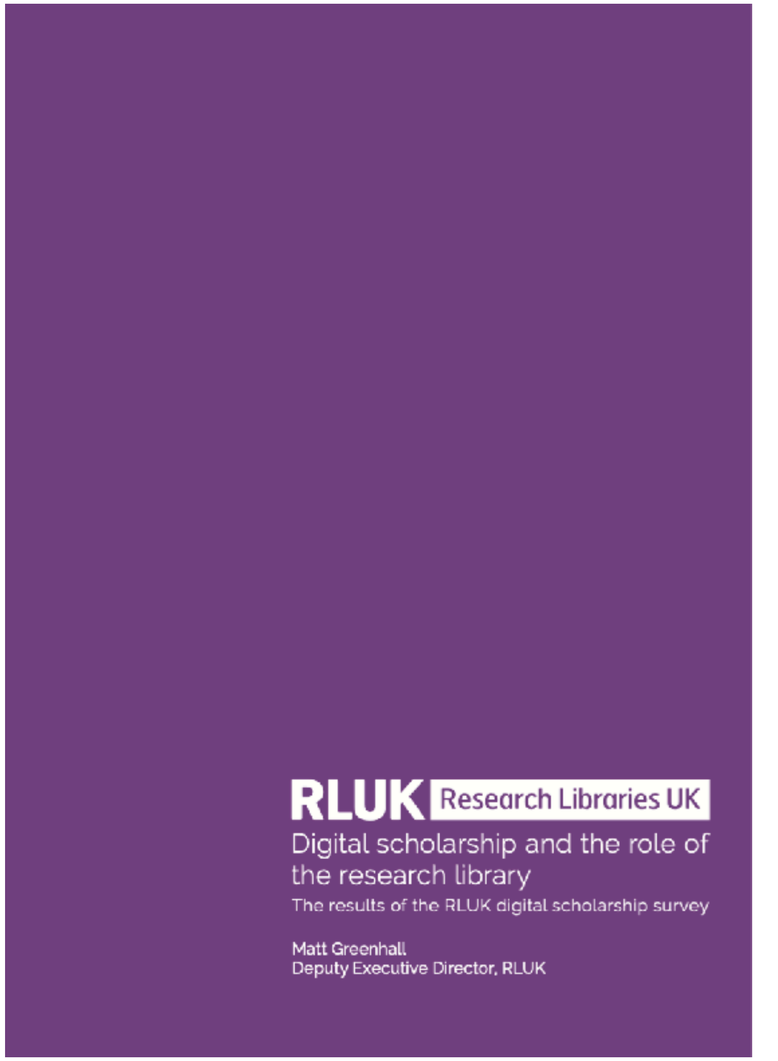
Digital scholarship is an incredibly awkward term that people have come up with to describe a complex group of developments. The phrase is really, at some basic level, nonsensical.

~ Clifford Lynch



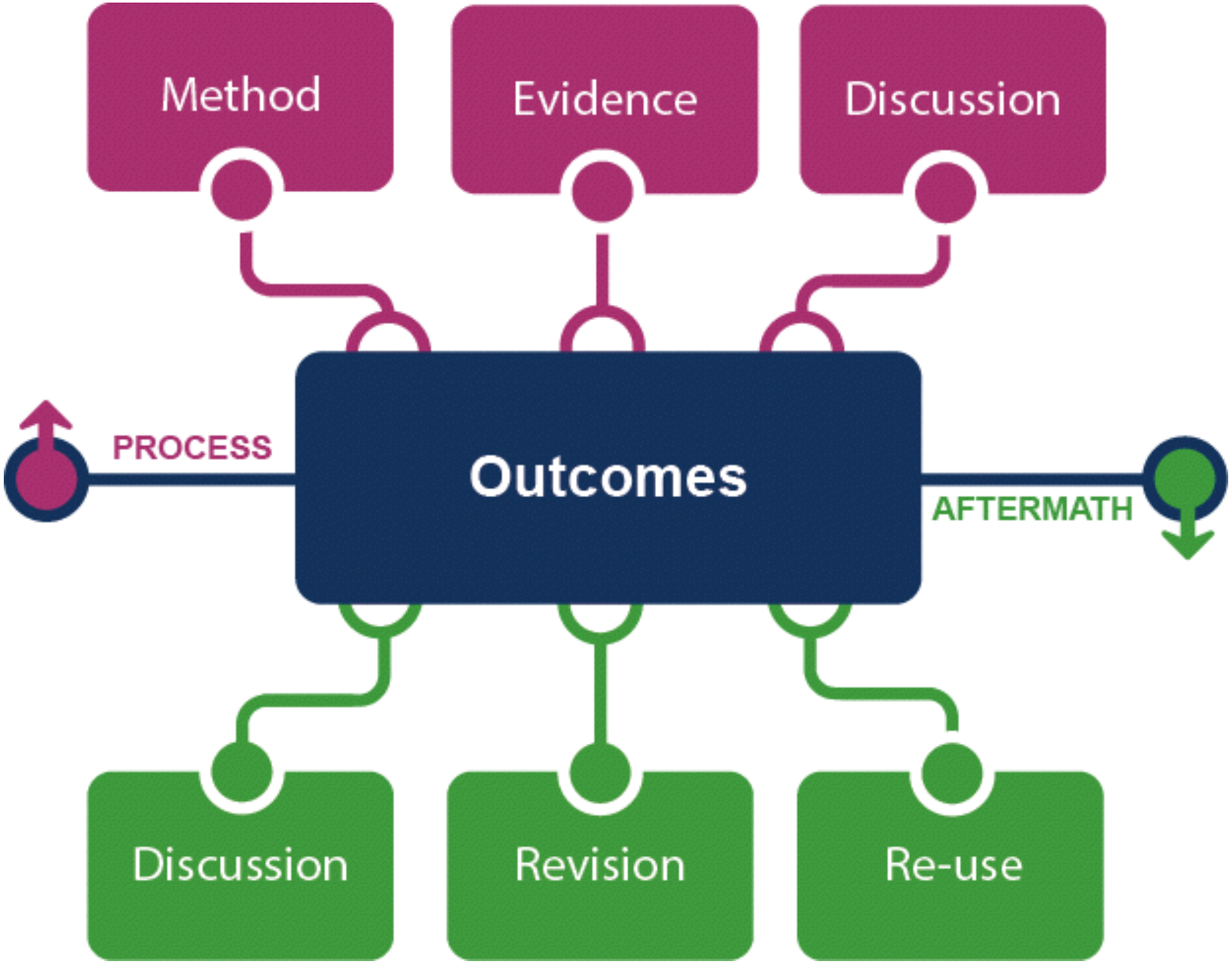
GIS and digital mapping
Digitisation/imaging of analogue material
Curating digital collections
Metadata creation
Digital preservation
Data curation and management
3-D modelling and printing
Statistical analysis/support
Digital exhibits
Project planning
Digital publishing
Project management
Computational text analysis/support
Interface design and/or usability
Visualisation
Database development
Technical upkeep
Encoding content (e.g. TEI markup)
Developing digital scholarship software



https://publications.arl.org/Supporting-Digital-Scholarship-SPEC-Kit-350/

https://www.rluk.ac.uk/portfolio-items/digital-scholarship-and-the-role-of-the-research-library/

Projects
Funding



http://www.oclc.org/research/publications/library/2014/oclcresearch-evolving-scholarly-record-2014-overview.html

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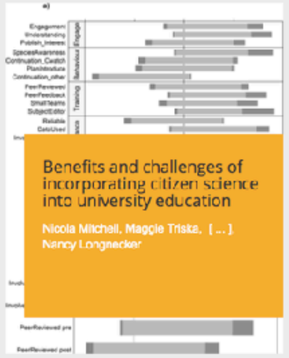
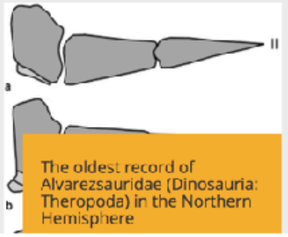
A new giraffid (Mammalia, Ruminantia, Pecora) from the late Miocene of Spain, and the evolution of the...

María Ríos, Israel M. Sánchez, Jorge Morales

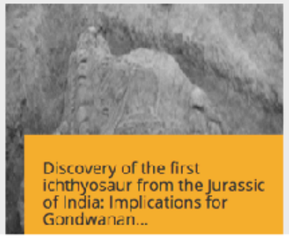


Benefits and challenges of incorporating citizen science into university education

Nicola Mitchell, Maggie Triska, [...] Nancy Longnecker



The oldest record of Alvarezsauridae (Dinosauria: Theropoda) in the Northern Hemisphere

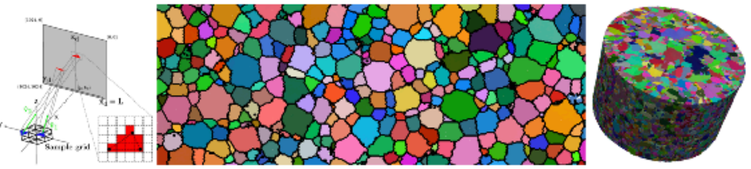


Discovery of the first ichthyosaur from the Jurassic of India: Implications for Gondwanan...

HOME

Carnegie Mellon University

Physics Carnegie Mellon



Left: *Schematic of computational reconstruction with meshed sample plane, detector and projection geometry.* Center: *A sub-region of a reconstructed microstructure. Colors are coded to the local crystallographic orientations (J. Lind thesis, 2013).* Right: *Three dimensional reconstructed copper microstructure (R. Pokharel thesis 2013).*
For information about Carnegie Mellon Univeristy, click here.
For information about the CMU Physics Department, click here.

R. M. Suter Research Group

High Energy X-rays Applied to Microstructure Science

Contact: suter@andrew.cmu.edu

Recent Publications (2014 - 2017)

1. R. M. Suter, "Multiscale measurements for materials modeling," Science, **356**, 704-705 (2017). article
2. L. Wang, Z. Zheng, H. Phukan, P. Kenesei, J.-S. Park, J. Lind, R.M. Suter, T.R. Bieler, "Direct measurement of critical resolved shear stress of prismatic and basal slip in polycrystalline Ti using high energy X-ray diffraction microscopy", Acta Materialia, **132**, 598610 (2017). article
3. W. K. Epting, Z. Mansley, D. B. Menasche, P. Kenesei, R. M. Suter, K. Gerdes, S. Litster, P. A. Salvador, "Quantifying intermediate-frequency heterogeneities of SOFC electrodes using X-ray computed tomography," J. Am. Ceramic Soc, **100**, 2232-2242 (2017). article
4. A. Bagri, J. P. Hanson, J. Lind, P. Kenesei, R. M. Suter, S. Gradečak, M. J. Demkowicz, "Measuring grain boundary character distributions in Ni-base alloy 725 using high-energy diffraction microscopy," Metallurgical and Materials Transactions A, **48**, 354-361 (2016). article
5. S. Maddali, S. Taasan, and R.M. Suter, "Topology-faithful nonparametric estimation and tracking of bulk interface networks," Computational Materials Science **125**, 328-340 (2016). article

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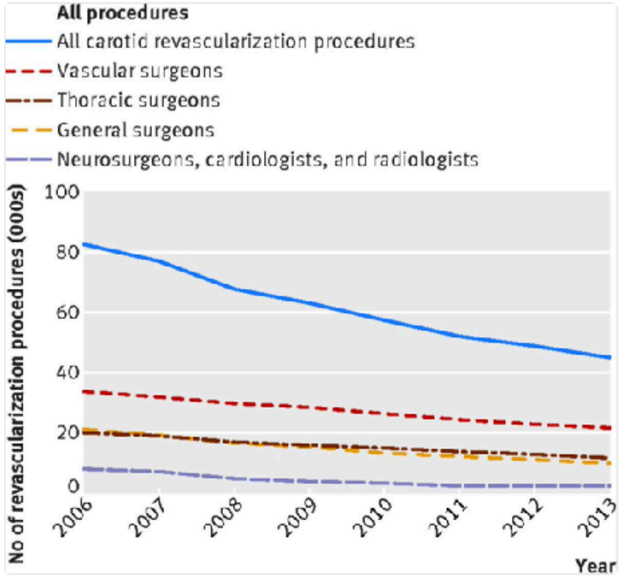

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Subject search and browse: Physics | Search | Form Interface | Catchup

31 Oct 2017: 2017 holiday schedule announced
11 Oct 2017: Donate to arXiv Oct 16-19!
26 Sep 2017: Introducing arXiv/Econ (Economics)
18 Sep 2017: Introducing arXiv/EESS (Electrical Engineering and Systems Science)
11 Sep 2017: Steinn Sigurdsson Appointed as arXiv Scientific Director
See cumulative "What's New" pages. Read robots beware before attempting any automated download

Physics

- Astrophysics (**astro-ph** new, recent, find)
  includes: Astrophysics of Galaxies; Cosmology and Nongalactic Astrophysics; Earth and Planetary Astrophysics; High Energy Astrophysical Phenomena; Instrumentation and Methods for Astrophysics; Solar and Stellar Astrophysics
- Condensed Matter (**cond-mat** new, recent, find)
  includes: Disordered Systems and Neural Networks; Materials Science; Mesoscale and Nanoscale Physics; Other Condensed Matter; Quantum Gases; Soft Condensed Matter; Statistical Mechanics; Strongly Correlated Electrons; Superconductivity
- General Relativity and Quantum Cosmology (**gr-qc** new, recent, find)
- High Energy Physics - Experiment (**hep-ex** new, recent, find)
- High Energy Physics - Lattice (**hep-lat** new, recent, find)
- High Energy Physics - Phenomenology (**hep-ph** new, recent, find)
- High Energy Physics - Theory (**hep-th** new, recent, find)
- Mathematical Physics (**math-ph** new, recent, find)
- Nonlinear Sciences (**nlin** new, recent, find)
  includes: Adaptation and Self-Organizing Systems; Cellular Automata and Lattice Gases; Chaotic Dynamics; Exactly Solvable and Integrable Systems; Pattern Formation and Solitons
- Nuclear Experiment (**nucl-ex** new, recent, find)
- Nuclear Theory (**nucl-th** new, recent, find)

ENA
European Nucleotide Archive

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European Nucleotide Archive

The European Nucleotide Archive (ENA) provides a comprehensive record of the world's nucleotide sequencing information, covering raw sequencing data, sequence assembly information and functional annotation. More about ENA

Access to ENA data is provided though the browser, through search tools, large scale file download and through the API.

Text Search

Examples: BN000065, histone

Search

Advanced search

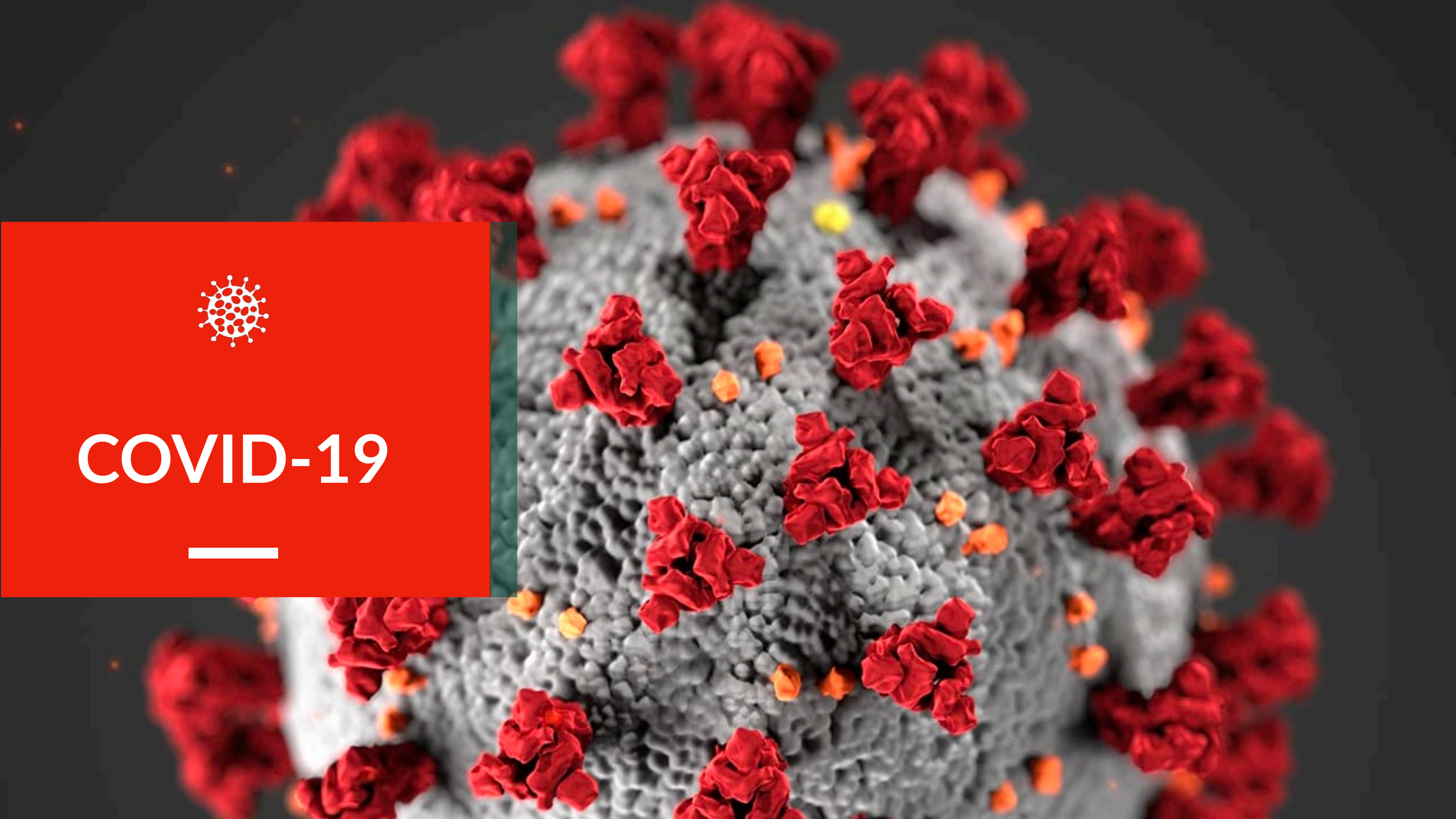
Sequence Search

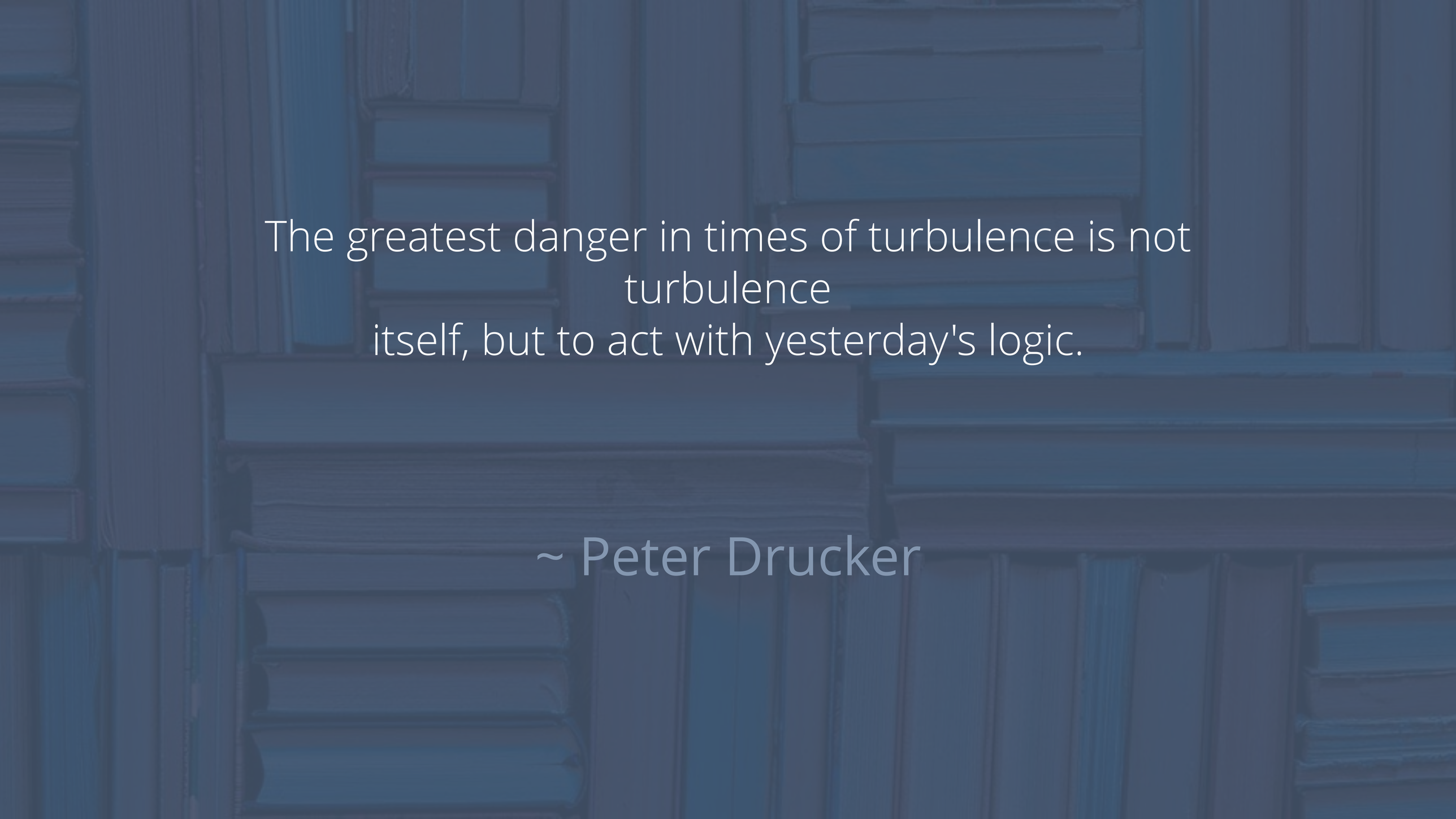
Enter or paste a nucleotide sequence or accession number

Search

Advanced search

EXIT
CENTER for
DIGITAL
SCHOLARSHIP
NAVARI FAMILY CENTER
FOR DIGITAL SCHOLARSHIP
HACK
ATHON
BUILDING CONNECTIONS


COVID-19

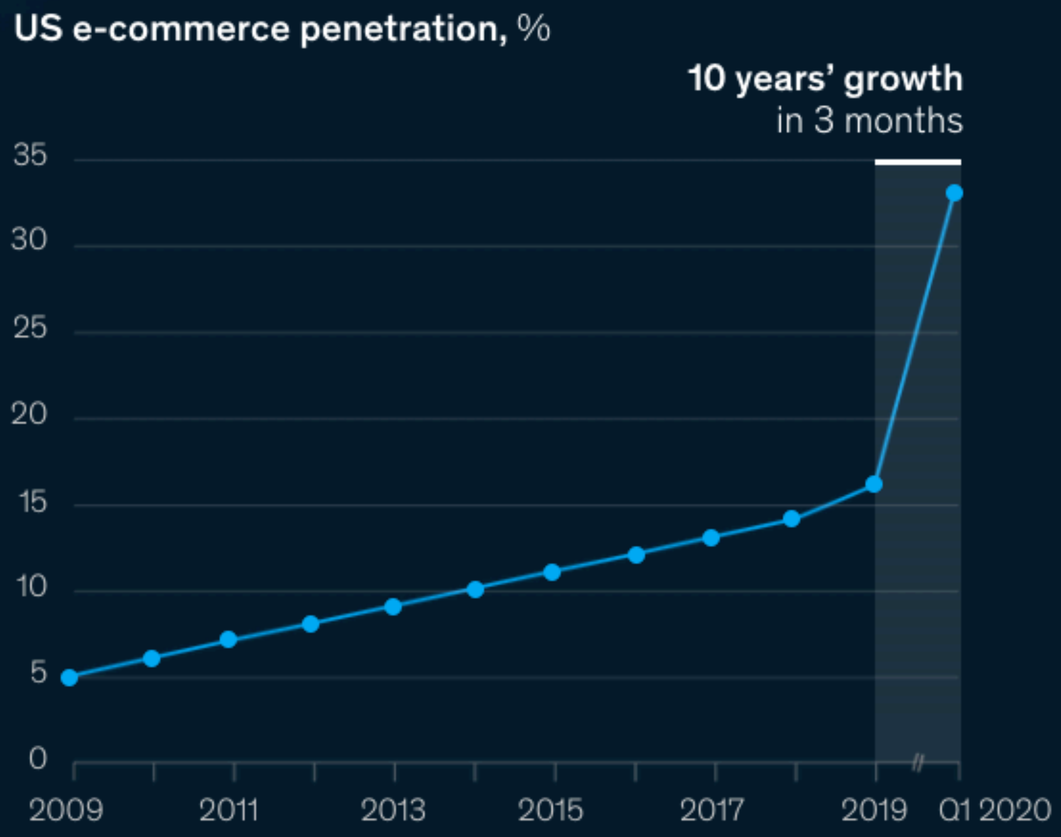


The greatest danger in times of turbulence is not turbulence
itself, but to act with yesterday's logic.

~ Peter Drucker

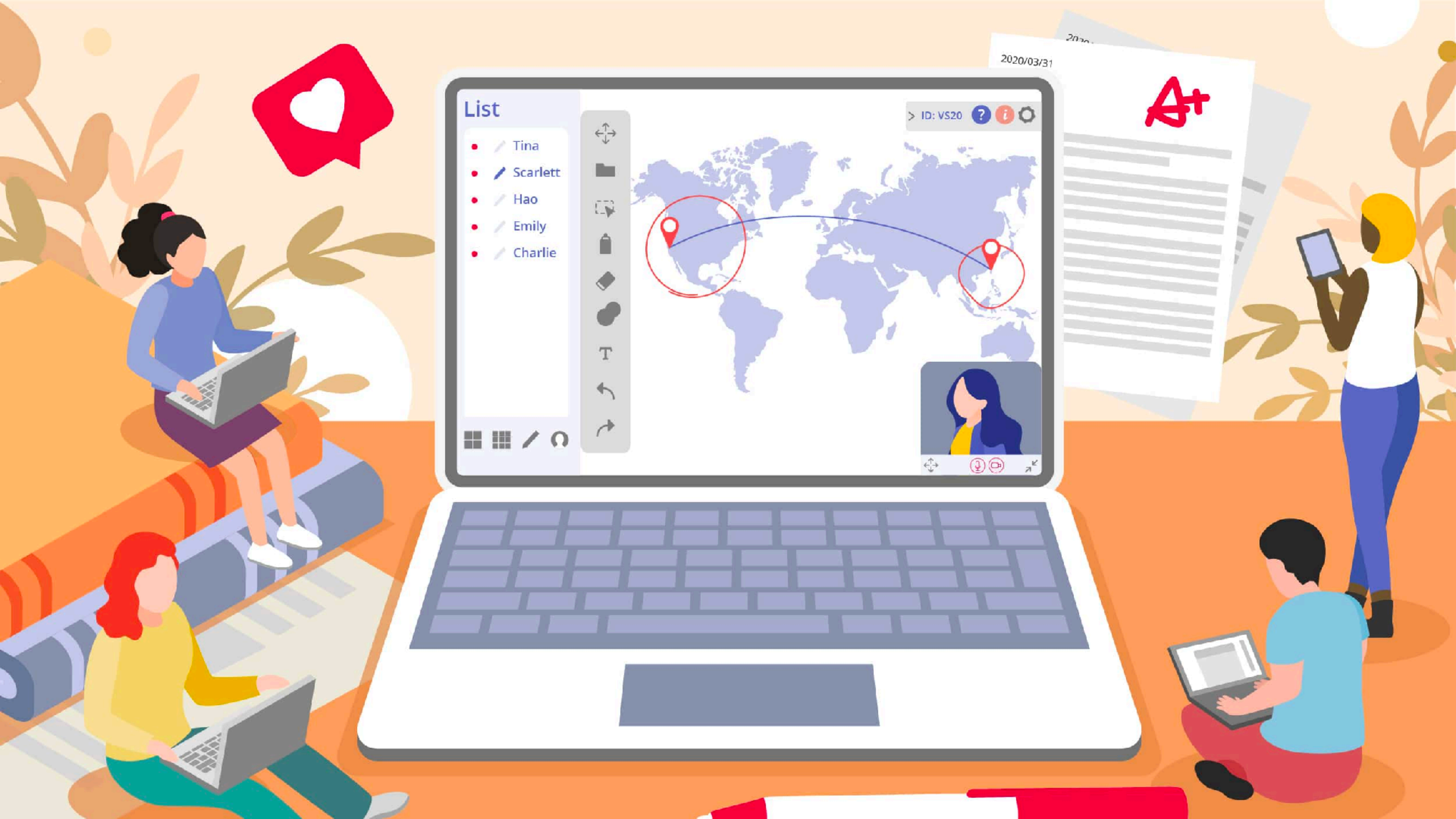
The leap

How fast is the world moving around us? Consider how quickly e-commerce has replaced physical channels in three months.



Source: Bank of America; Forrester Analytics; ShawSpring Research; US Department of Commerce; McKinsey analysis

https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/five-fifty-the-quickening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Tina
Scarlett
Hao
Emily
Charlie
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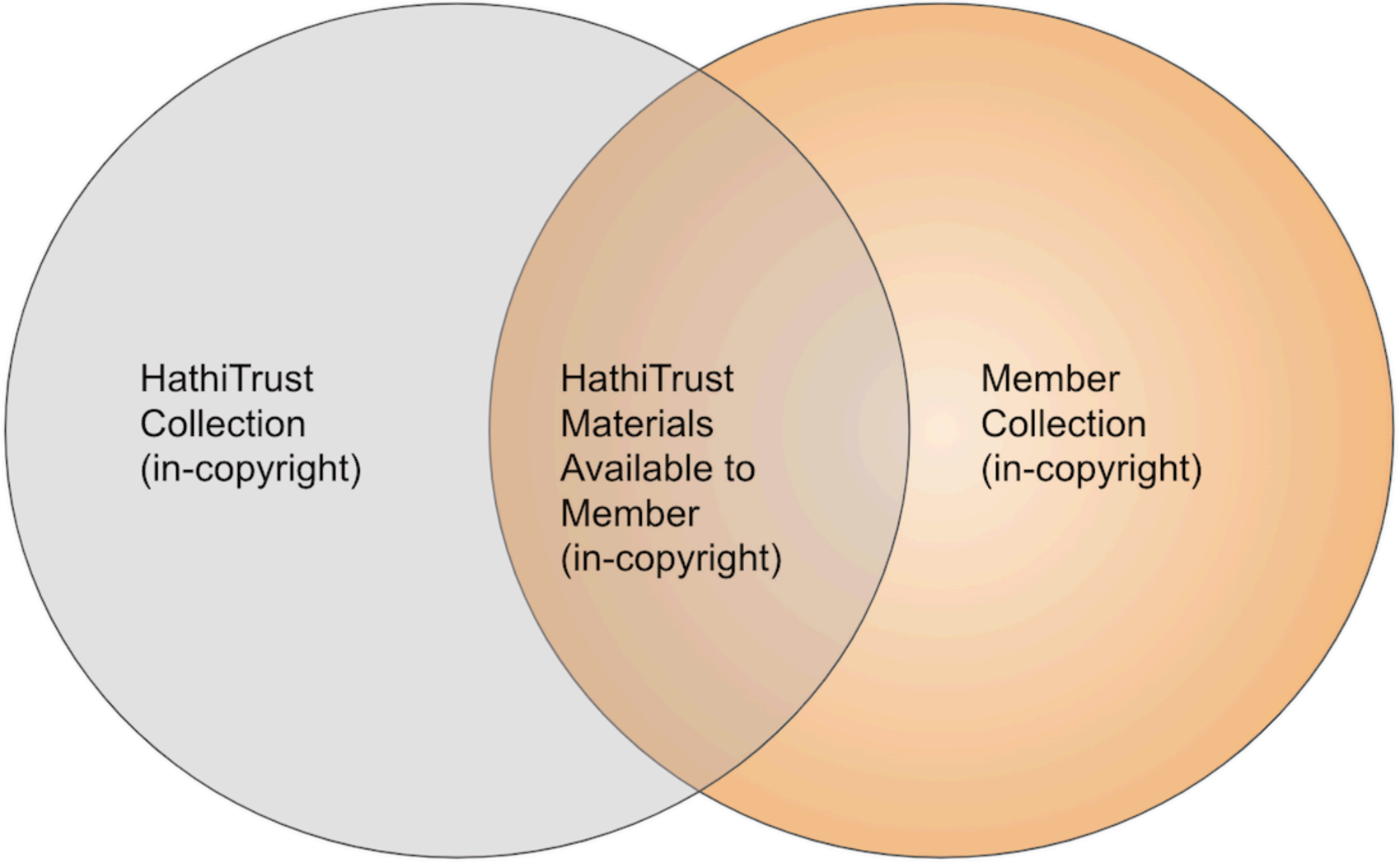
2020/03/31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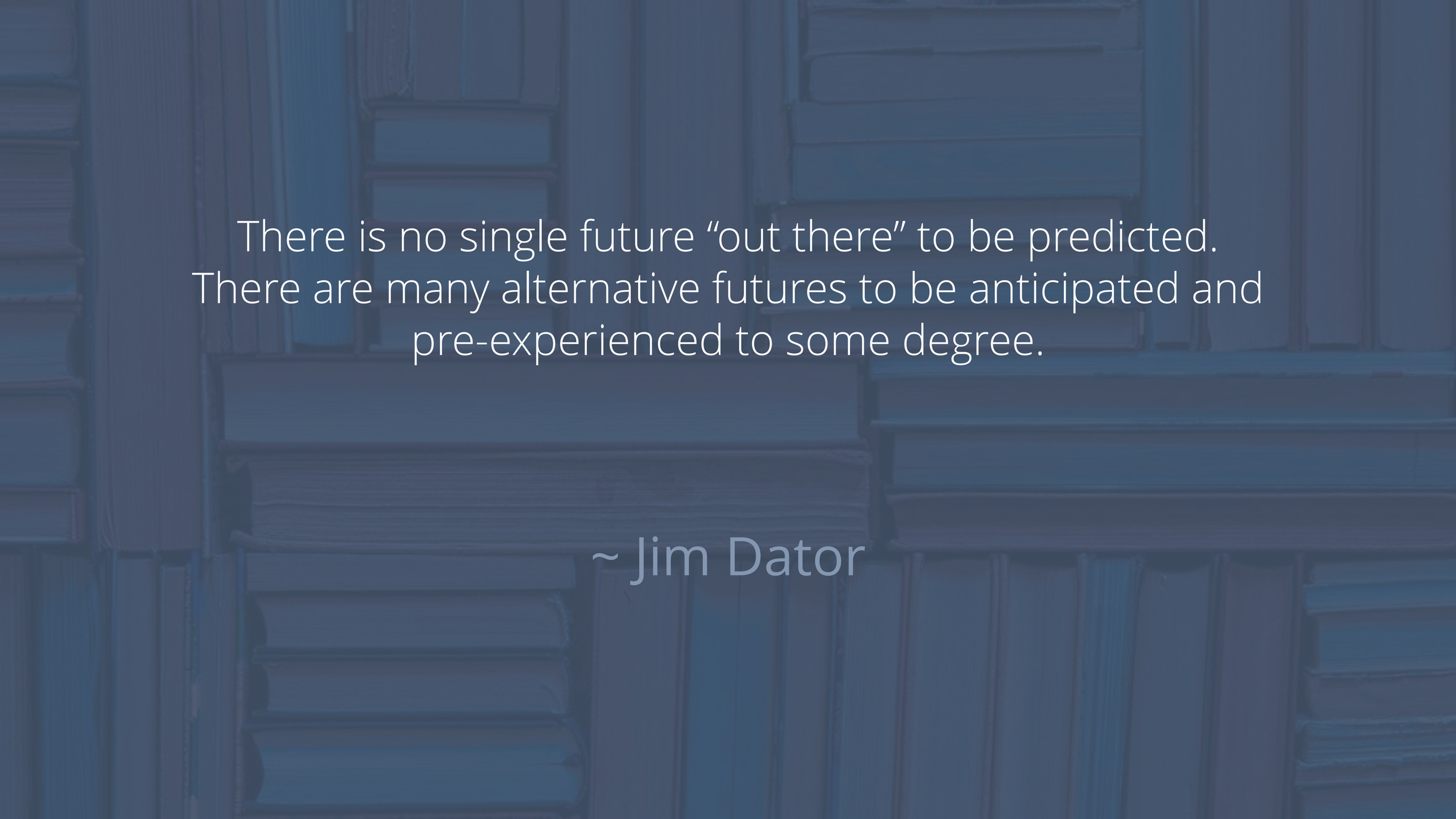
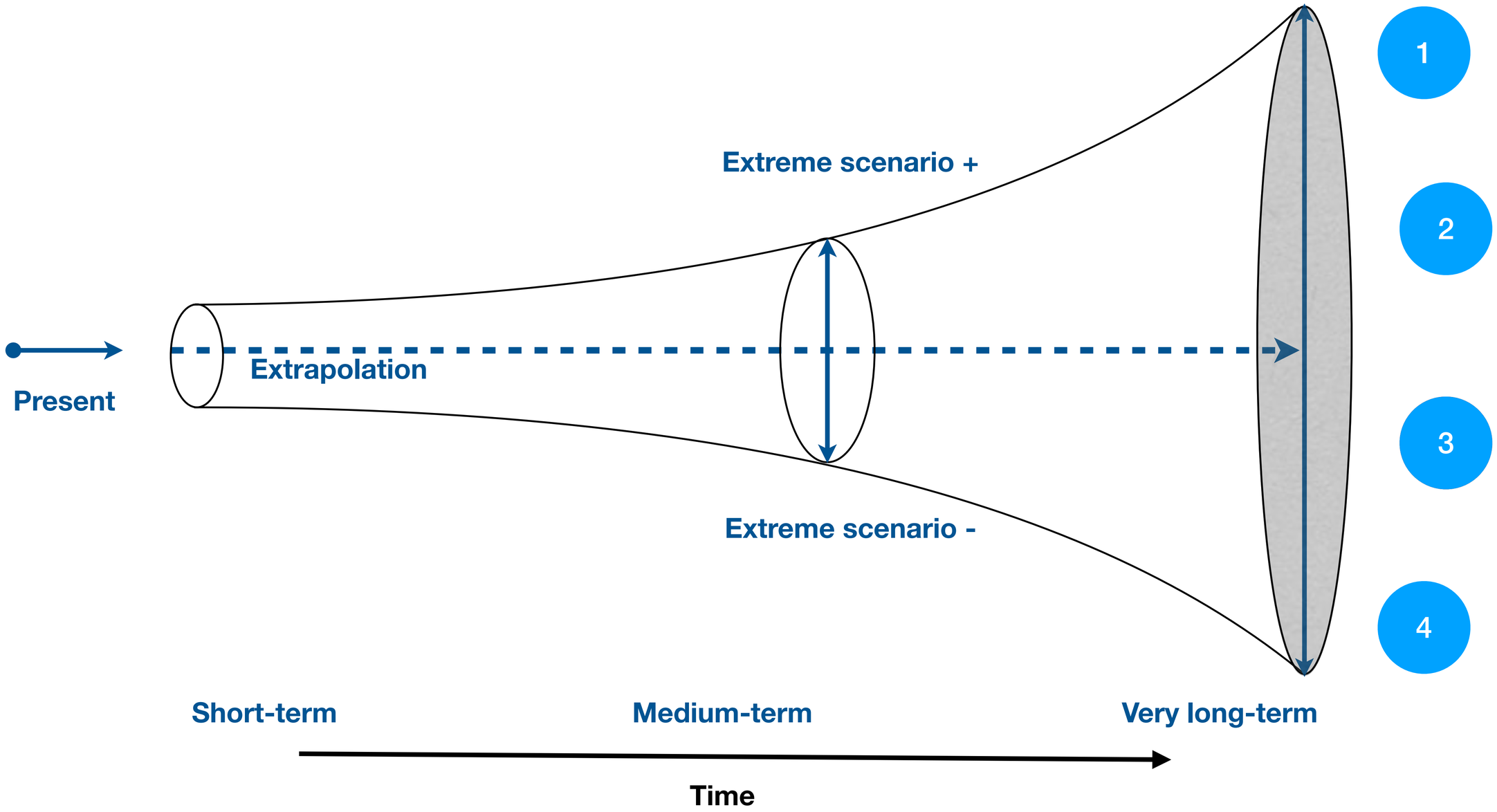
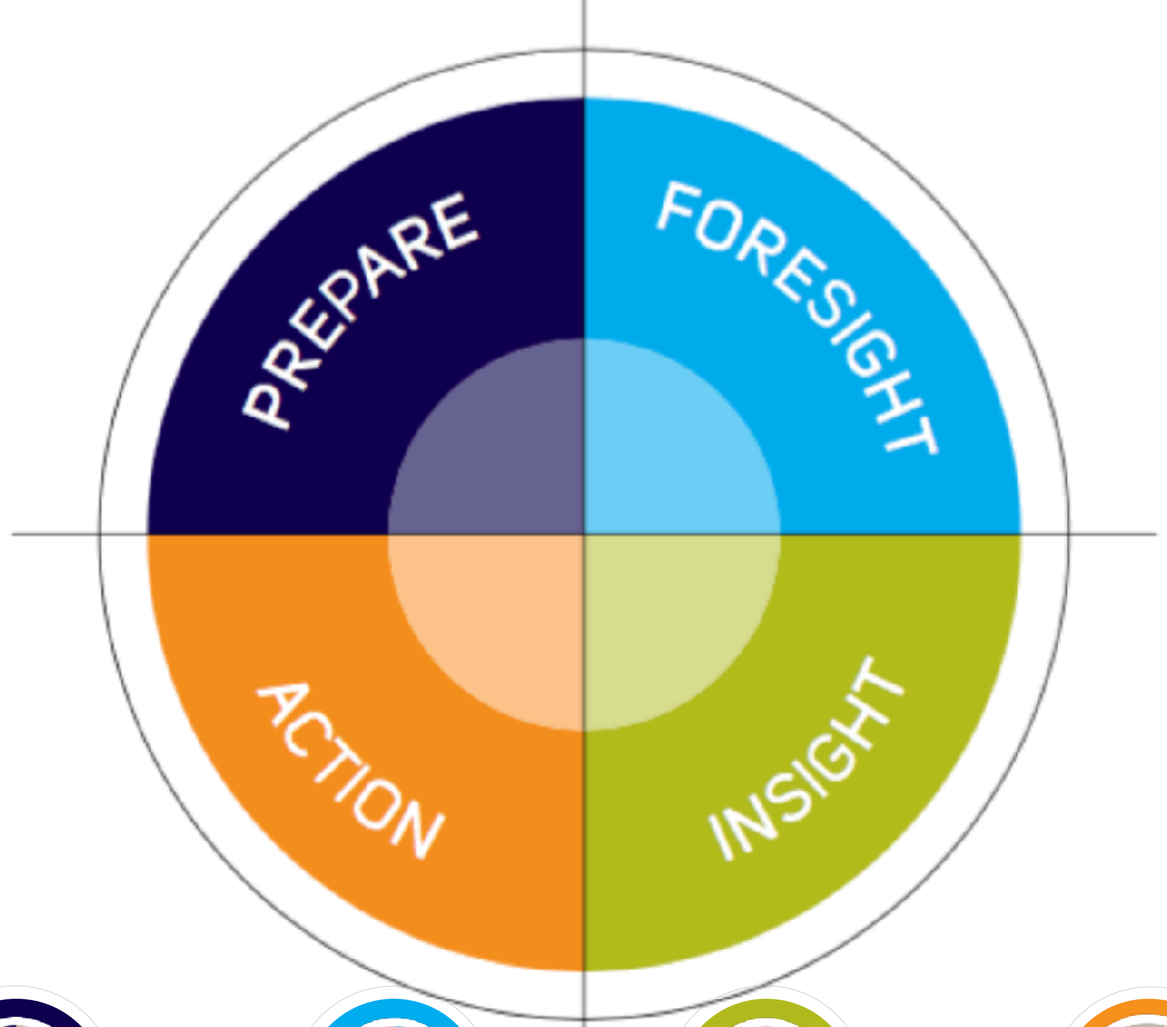


There is no single future “out there” to be predicted.
There are many alternative futures to be anticipated and
pre-experienced to some degree.

~ Jim Dator


Extreme scenario +
Extrapolation
Present
Extreme scenario -
1
2
3
4
Short-term
Medium-term
Very long-term
Time



Prepare

Orient to the future
Identify drivers of change
Catalog signals of change

Foresight

Draft a forecast
Envision futures
Headline the future

Insight

Ride two curves
Map cross-impacts
Prioritize actions

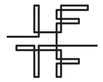
Action

Build a roadmap
Rally a network
Identify assets and gaps

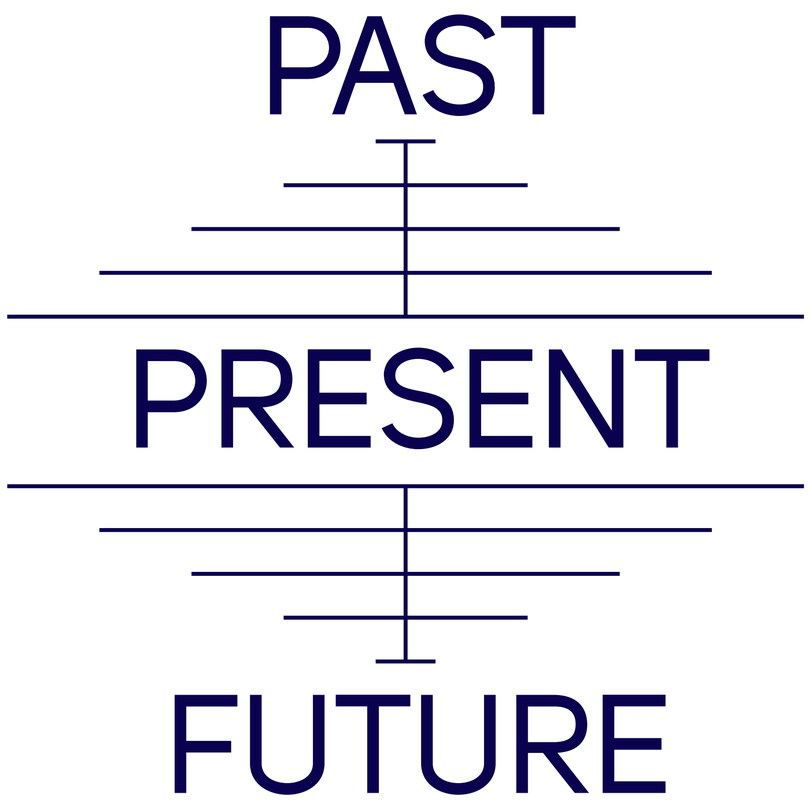
PREPARE

LOOK BACK TO LOOK FORWARD

Imagining a future that is very different from today can often be a struggle, especially when faced with today's constraints. But still, change happens—and it can happen faster than we expect. Looking into the past to uncover where and how change has happened will prepare participants to step out of today's constraints, and to explore what is possible.



IFTF FORESIGHT TOOLKIT



- **Get** the historical context you need to think about the future.
- **Build** a common perspective on important past events and moments when change happened.
- **Find** potential patterns of change, and explore how they may continue to shape the future.
- **Create** group awareness that major change has happened in the past, and will happen in the future.

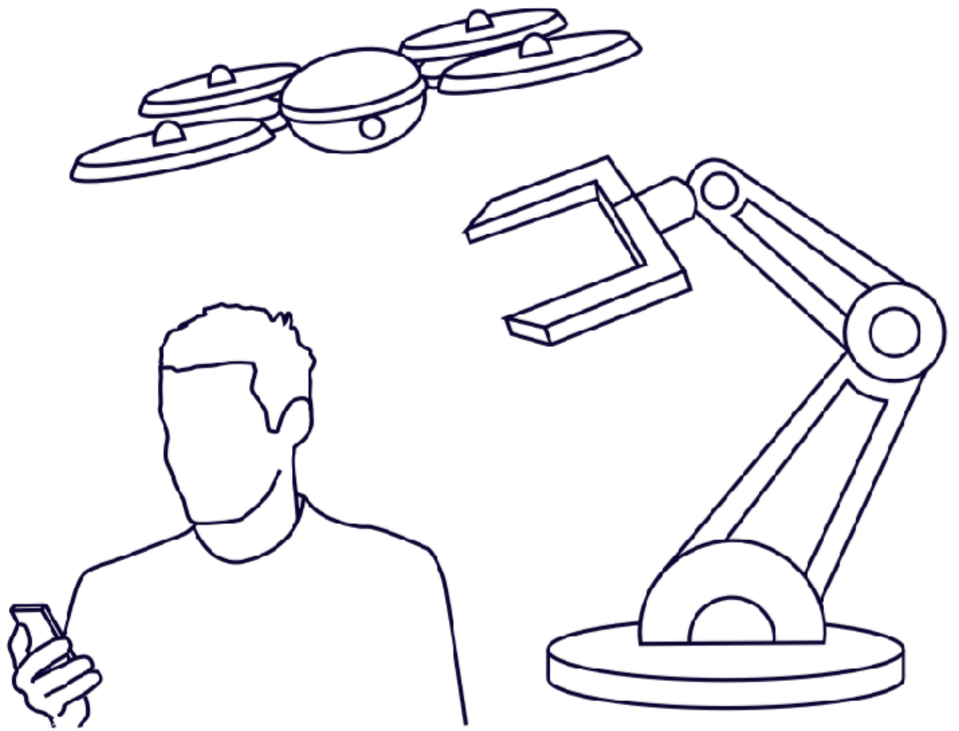
1.5

PREPARE

CATALOGUE SIGNALS OF CHANGE

A signal is a small or local innovation with the potential to disrupt the status quo, or scale up in size or geography. Continuously finding and cataloguing signals is a key component of researching the future.

IFTF FORESIGHT TOOLKIT



WHY THIS TOOL?

- **Research** evidence of futures in the making and cultivate curiosity.
- **Tune observations** to early signals before they become obvious trends by focusing attention on the margins rather than the mainstream.
- **Develop** a practice of scanning the horizon for possible futures.
- **Recognize** underlying shifts and implications hidden within today's innovations and new practices.

Provost’s Task Force on Academic Matters
Long-term Futures Group

Thinking about the long term impact of coronavirus on CMU

1) ...what are the biggest unknowns, worries, contingencies or critical uncertainties in our operating environment?

2) ...what new possibilities and avenues for our institutional success have been opened up by recent events?

3) ...what's the biggest provocation or change to our previous business as usual that should be considered for the longer-term?

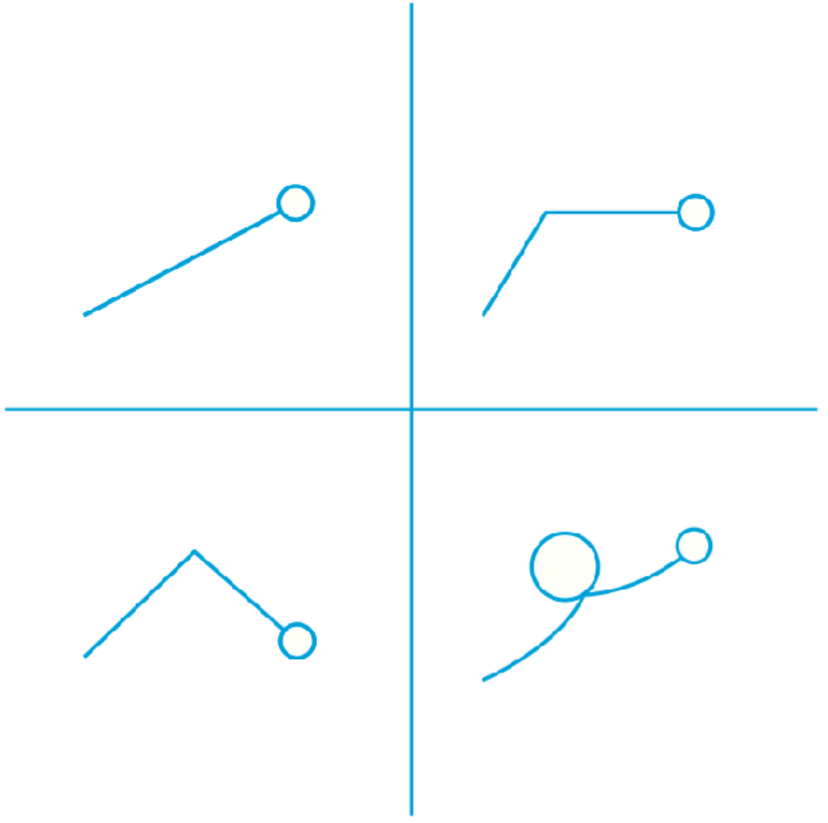
2.4

FORESIGHT

ENVISION ALTERNATIVE FUTURES

While a single future cannot be predicted, alternative futures can be envisioned. Four archetypes—growth, collapse, constraint, and transformation—help us envision futures that are neither variations of a single future, nor simple mirrors of the present.

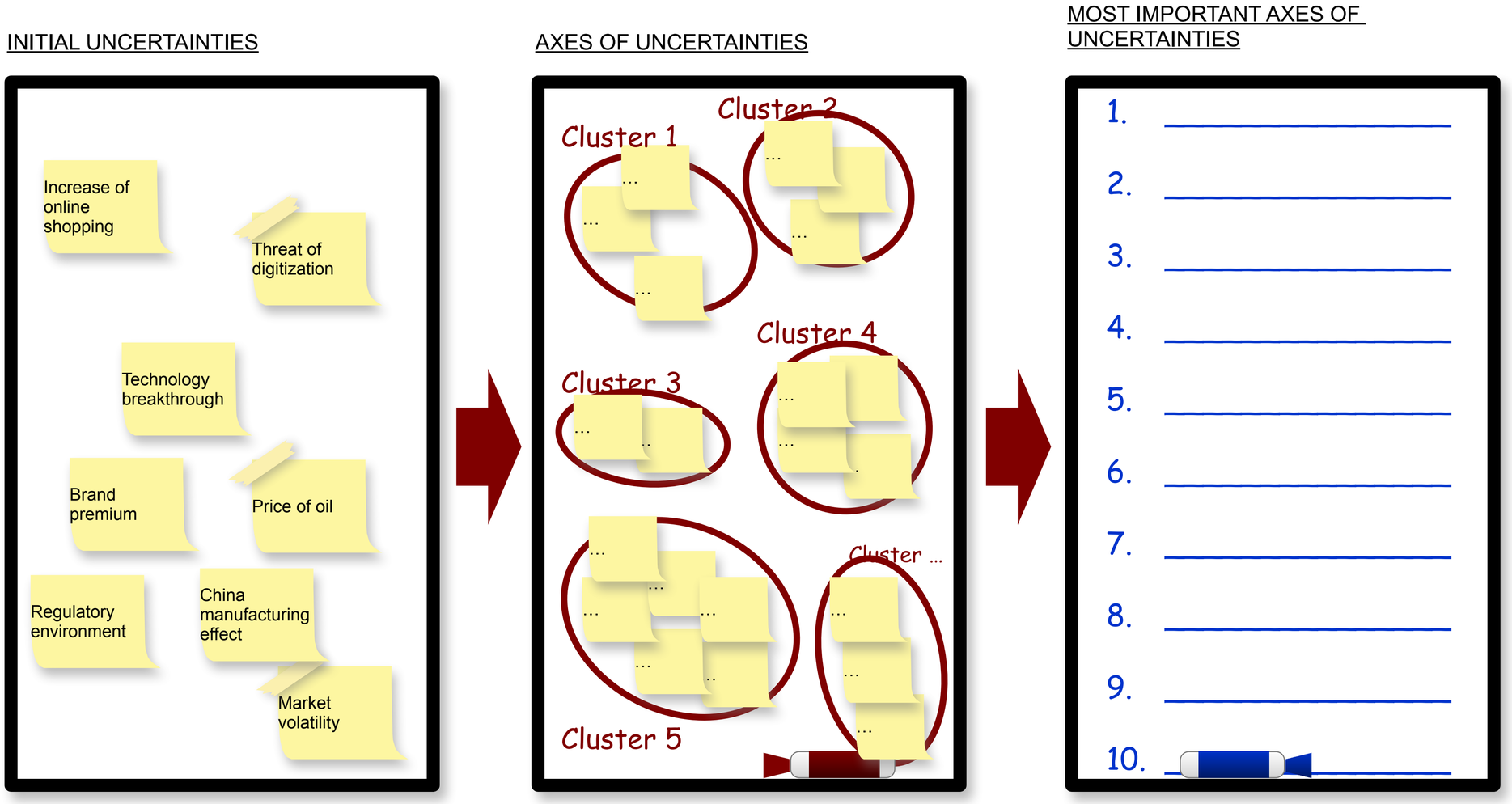
IFTF FORESIGHT TOOLKIT



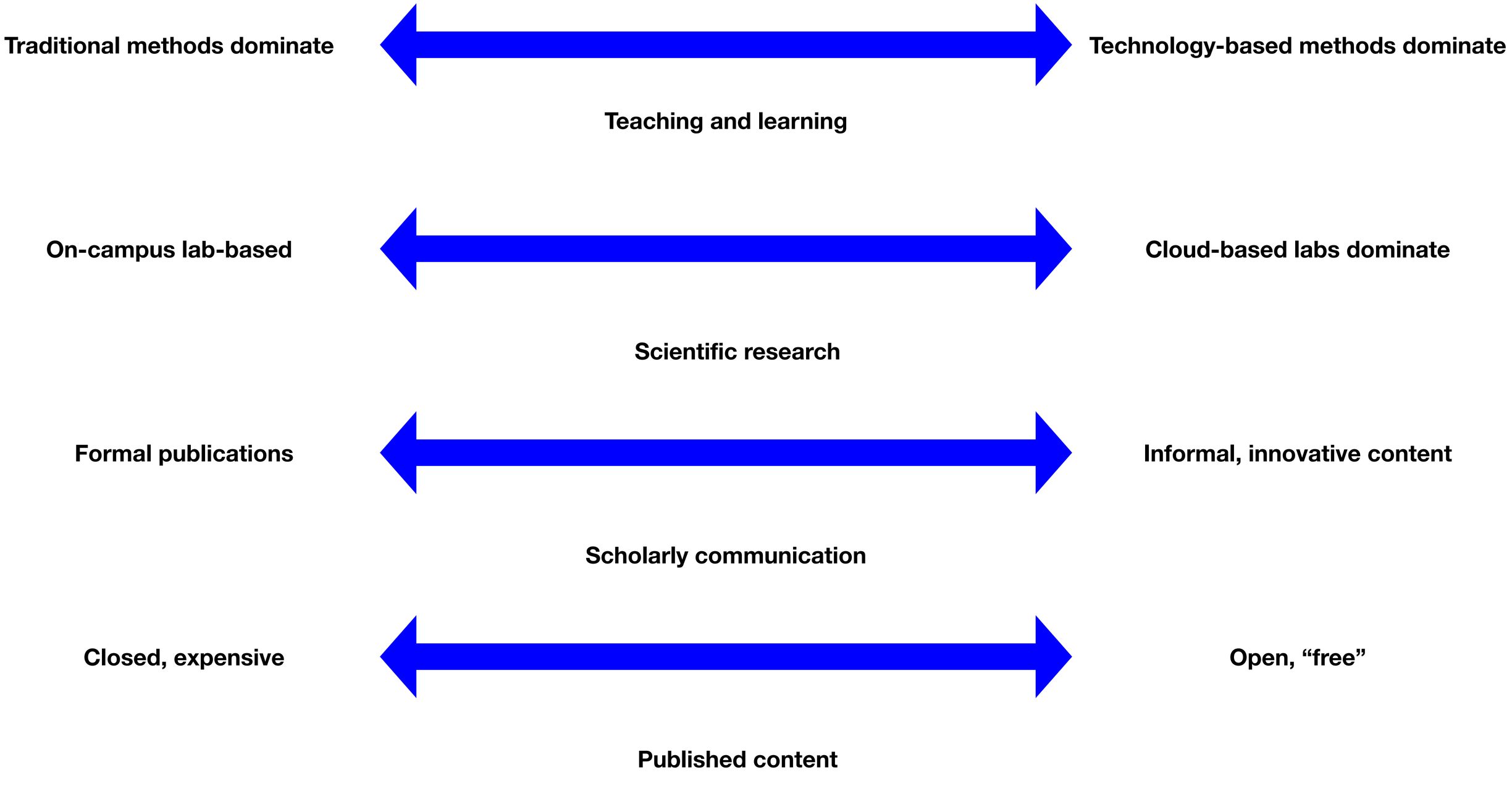
WHY THIS TOOL?

- **Expand** the stock of available futures for you or your organization to consider.
- **Uncover** hidden assumptions, biases, and blindspots.
- **Learn** to create a robust set of scenarios that can serve as a "wind tunnel" for testing strategies under different future conditions.

Uncertainties



AXES OF UNCERTAINTY	OUTCOME 1	OUTCOME 2
Regulatory environment	Harsh	Liberal
Brand premium	Erodes	Maintains
Price of oil	Increases	Drops
Technology breakthrough	Yes	No
Threat of digitization	High	Low
…	…	…
…	…	…
…	…	…
…	…	…
…	…	…
…	…	…


Traditional methods dominate
Technology-based methods dominate
Teaching and learning
On-campus lab-based
Cloud-based labs dominate
Scientific research
Formal publications
Informal, innovative content
Scholarly communication
Closed, expensive
Open, “free”
Published content

Making sense of the future

Five fundamental uncertainties are likely to have a significant impact post-COVID-19

Fundamental uncertainties explored

1. The overall **severity of the pandemic** and pattern of disease progression
2. The **level of collaboration** within and between countries
3. The **health care system** response to the crisis
4. The **economic consequences** of the crisis
5. The level of **social cohesion** in response to the crisis

Additional uncertainties explored

Society

- Levels of societal trust
- Psychological impacts after quarantine
- Impacts on different generations
- Long-term impacts on education

Technology

- Attitudes toward data-sharing
- Speed of technological innovation
- Long-term effects on the workplace
- Types of new technology adopted

Economy

- Speed of economic recovery
- Distribution of economic growth
- Impacts on inequality
- Shifts to new business models

Environment

- Focus on fighting climate change
- Reduction of emissions
- Investments in renewable energy

Politics

- Long-term impacts on governments
- Impacts on public policy and regulation
- Levels of trust in political systems
- Changes in election methodologies

Two critical uncertainties will drive the overall impact of COVID-19

1 | What is the overall **severity of the pandemic** and pattern of disease progression?

Lower impact → Higher impact

Rapid peak

The virus's spread shows a rapid peak before quickly declining

Self-dampening

Rapid exposure across individuals leads to eventual "herd immunity"

Gradual progression

A gradual and prolonged development of the virus's spread is seen

Roller-coaster

Seasonal waves of the viral disease are seen, with decreasing degrees of severity

Second-act

A second wave of viral infections emerges stronger than the first

2 | What is the **level of collaboration** within and between countries?

Significant → Marginal

Coordinated response

- Nations "think big and act fast." Effective collaboration within and between countries to contain the virus's spread through coordinated strategies and best practices (such as mandating quarantines and testing)
- Coordination to reduce mobility of people and slow transmission
- Proactive measures by public institutions to prevent future widespread viruses

Weak and divided

- Lack of coordination among governments and institutions to provide supplies and resources required to prevent virus's spread
- Lack of accountability and breakdown in communications and information-sharing
- Insufficient and uneven response to effectively address mobility of people carrying the disease

Making sense of the future

Four distinct scenarios emerge based on current trends and critical uncertainties

The passing storm

The pandemic is managed due to effective responses from governments to contain the virus, but is not without lasting repercussions, which **disproportionately affect SMBs and lower- and middle-income individuals and communities**.

- Relatively constrained disease dynamic
- Effective health system and policy response

Lone wolves

Prolonged pandemic period, spurring governments to **adopt isolationist policies**, shorten supply chains, and increase surveillance.

- Severe, rolling pandemics
- Insufficient global coordination and weak policy response

Good company

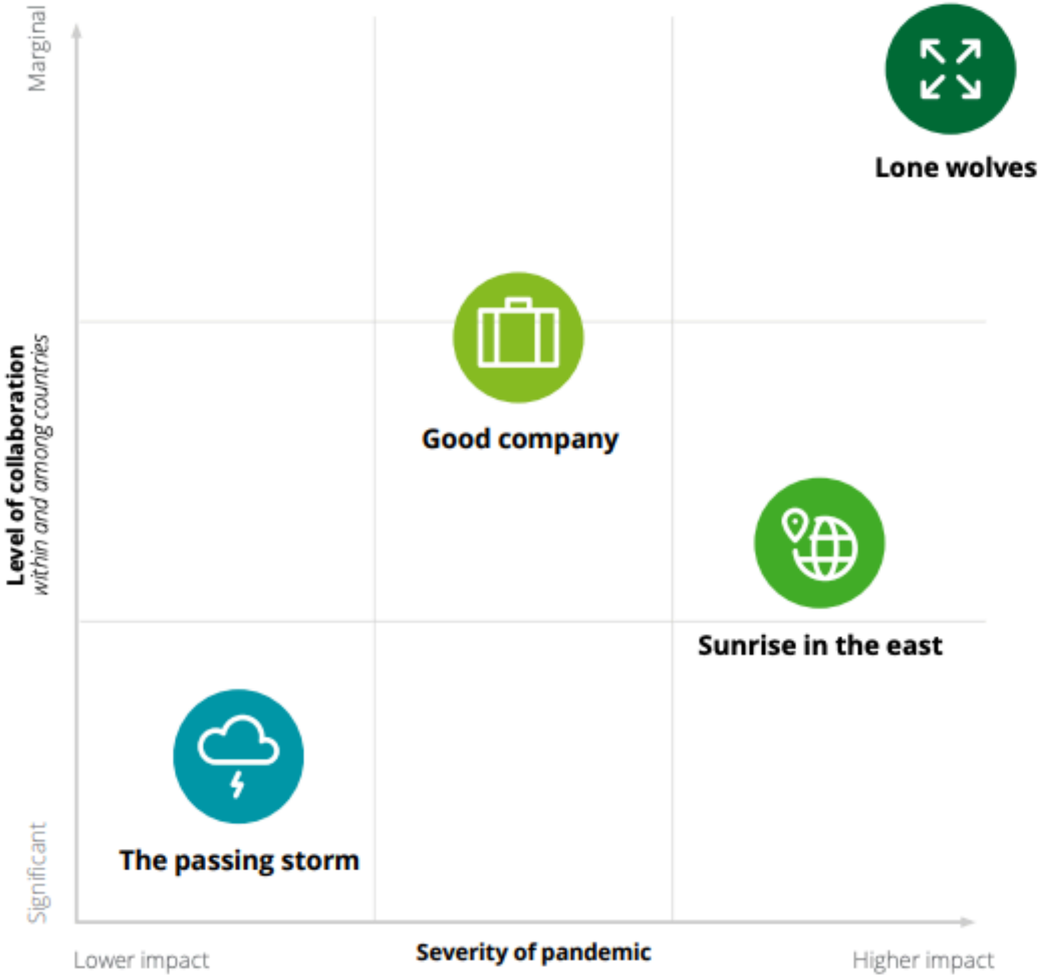
Governments around the world struggle to handle the crisis alone, with **large companies stepping up as a key part of the solution** and an acceleration of trends toward "stakeholder capitalism."

- More prolonged pandemic
- Collaboration to control the pandemic led by large companies

Sunrise in the east

China and other East Asian nations are more effective in managing the virus and take the reins as **primary powers on the world stage.**

- Severe pandemic
- Collaborative health response led by East Asian countries



These scenarios illustrate different ways in which the world could unfold after the crisis

	The passing storm	Good company	Sunrise in the east	Lone wolves
Society Social cohesion...	. . . **rises**, with a heightened appreciation for interpersonal and familial relationships	. . . **is maintained**, as society shifts to become more "purpose-driven"	. . . **shifts** to an increased emphasis on the "good of the whole"	. . . **falls**, as xenophobia and suspicion of others become the norm
Technology Technology advances...	. . . **stay on course**, as previous holdouts move online	. . . **take the center stage**, with large companies driving solutions in areas such as health tech and biotech	. . . **are accelerated**, as more data-sharing allows for advances in AI and other advanced tech capabilities	. . . **are divergent** among different markets, with a focus on advances in surveillance and control measures
Economy Worldwide economies...	. . . **enter an extended recession**, with increased income inequality	. . . **are disrupted**, with a growing concentration of power among large companies	. . . **shrink**, due to the prolonged nature of the virus	. . . **are left in turmoil**, as global supply chains are disrupted
Environment Focus on climate change...	. . . **is renewed**, as global collaboration provides hope for progress	. . . **is mixed**, with some sustainability-minded companies investing in renewable energy	. . . **is deemphasized**, as economic recovery is prioritized	. . . **declines**, as countries shift toward energy independence
Politics Governments around the world...	. . . **gain trust**, and international organizations such as WHO grow in relevance	. . . **partner** with large corporations, who step up as part of the solution	. . . **look to the east** for guidance, as Asian countries effectively manage the virus	. . . **adopt isolationism**, as they attempt to contain the virus within

The passing storm

Similar to past recessions
Gap increases between haves and have nots
Top institutions relatively unscathed
Incremental change; model of h.e. somewhat unchanged

Lone wolves

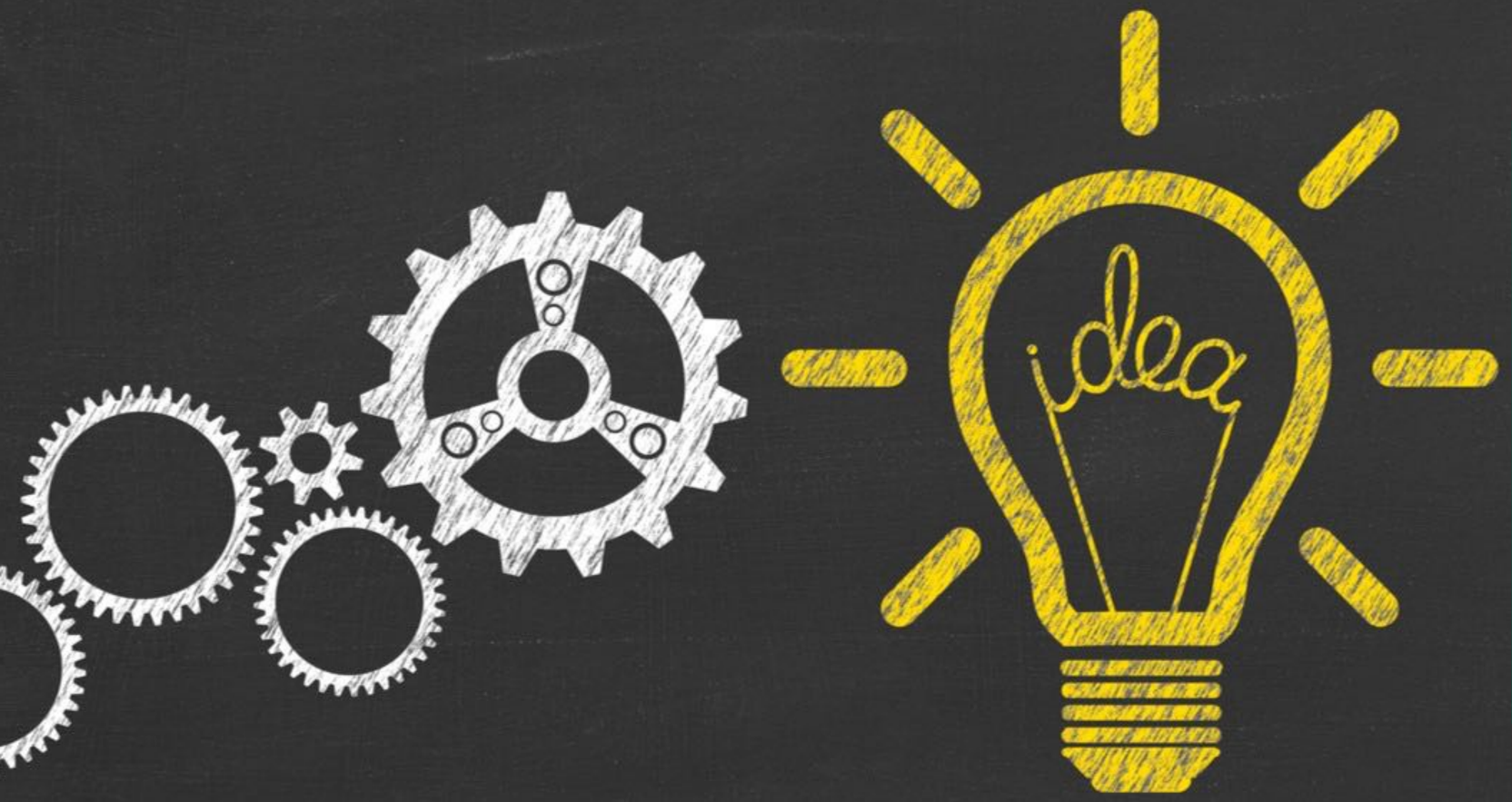
Rolling and unpredictable lockdowns makes calendar unworkable
Few select growth areas for h.e. (/but perhaps good for CMU)
‘Elite’ education becomes a source of protest
Shift of h.e. online grows digital divide

Good company

Greater corporate role in h.e. - eg Facebook University
More employer funded tuition but focussed on growth at work
Corporate acquisition of education providers
Shrinkage of public university sector

Sunrise in the east

Decline of western h.e.
Asian universities attract best faculty and students
International student mobility goes to Asia
Further erosion of public trust in the academy
Increased focus on technology

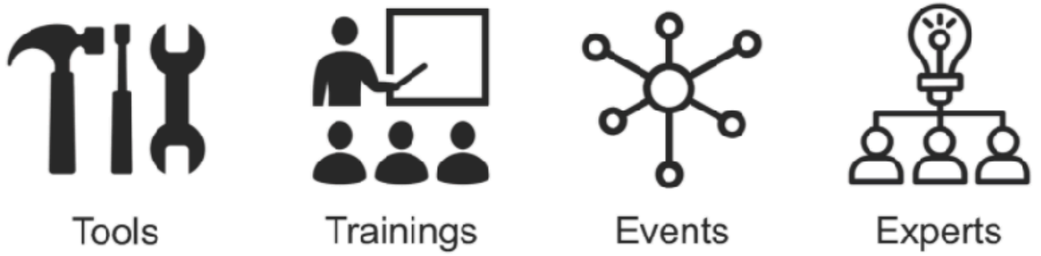


DIGITAL SCHOLARSHIP RECONSIDERED

As businesses step into the post-coronavirus future, they need to find a balance between what worked before and what needs to happen to succeed in the next normal.

~ McKinsey & Co.

A University Libraries program supporting collaborative, transparent, openly accessible, and reproducible research across all disciplines at Carnegie Mellon University. We recognize that having well documented and automated research workflows, code, and datasets is essential to making research more interdisciplinary, efficient, and reusable as well as allowing researchers to leverage data science techniques. This program provides services and infrastructure for open research at CMU through digital tools, training opportunities for research tools and practices, collaboration opportunities on data science projects, special events and advocacy, and a team of experts available as research consultants and collaborators.



The Open Science Team

Katie Behrman, KiltHub Repository Coordinator

Melanie Gainey, Biological Sciences, Biomedical Engineering

Hannah Gunderman, Research Data Consultant; Data Management

Huajin Wang, Biological Sciences, Computer Science, Data Collaborations and Reproducibility

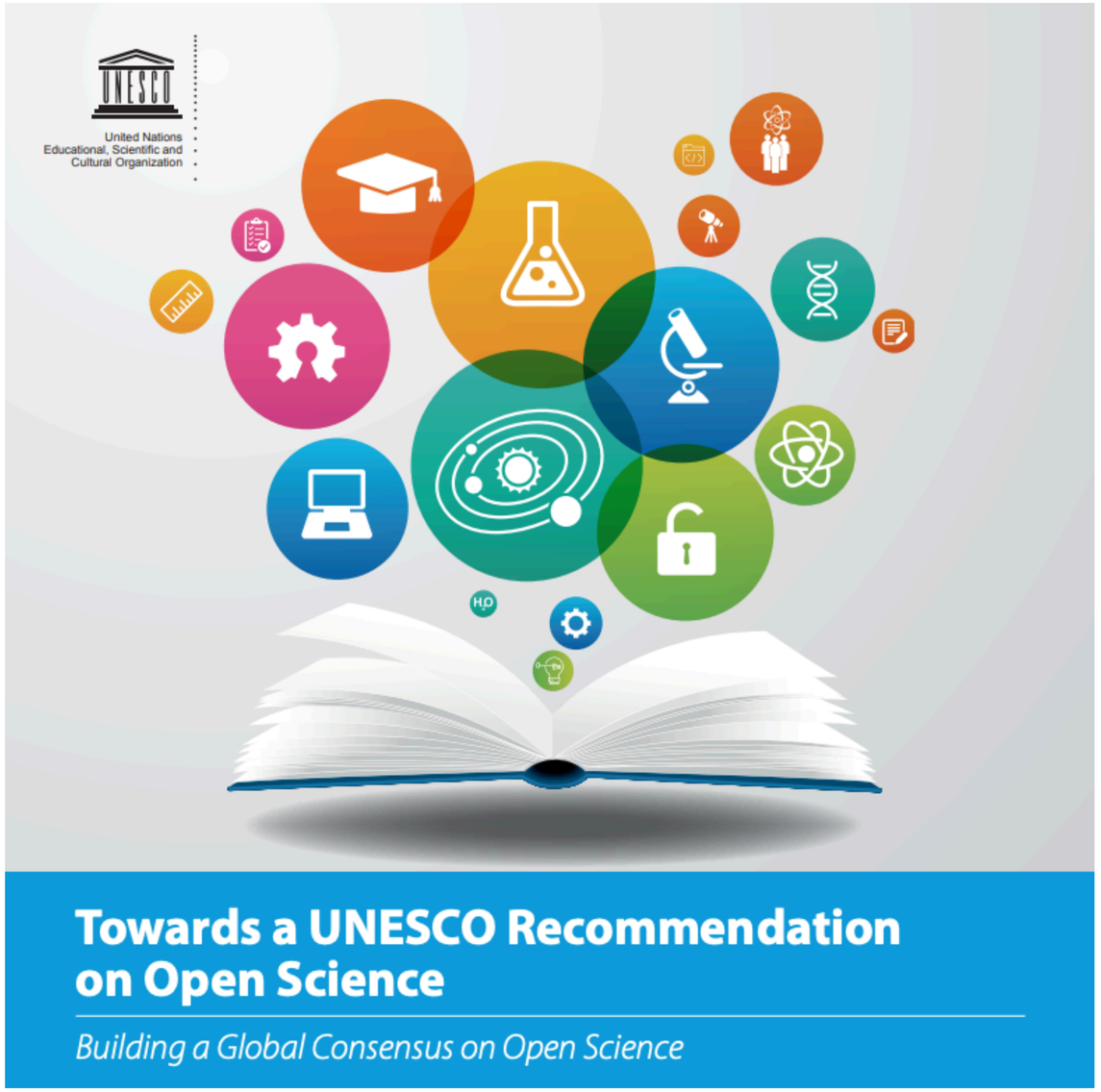
Sarah Young, Social Sciences, Public Policy and Information Systems; Evidence Synthesis

Contact Us

Email the Open Science Team

Workshops and Events

- Data Visualization Best Practices
  6:00pm - 7:00pm Thursday, September 10, 2020
- Literature Review for Engineering Graduate Students
  12:00pm - 1:00pm Tuesday, September 15, 2020
- Introduction to Making Data Visualizations Using Tableau
  6:00pm - 7:00pm Tuesday, September 15, 2020
- Being Recognized: Managing your Author Identity and Improving your Research Communication Skills
  7:00pm - 8:00pm Thursday, September 17, 2020
- Making your Research and Scholarship Open and FAIR: Open Access and Research Data Management Services at CMU
  6:00pm - 7:00pm Tuesday, September 22, 2020
- Getting Started with Zotero
  12:00pm - 1:00pm Thursday, September 24, 2020
- Data Management for STEM
  6:00pm - 7:00pm Tuesday, September 29, 2020
- Writing an Effective Data Management Plan
  6:00pm - 7:00pm Tuesday, October 6, 2020
- Cleaning Untidy Data with OpenRefine
  12:00pm - 1:30pm Thursday, October 8, 2020
- Responsible Conduct of Research Training - Day 1
  12:00pm - 5:00pm Thursday, October 8, 2020



“The COVID-19 pandemic raises our awareness of the importance of science, both in research and international cooperation. The present crisis also demonstrates the urgency of stepping up information sharing through open science. The time has come for us to commit all together,”

–UNESCO Director-General Audrey Azoulay

Press release | 31 January 2020

Sharing research data and findings relevant to the novel coronavirus (COVID-19) outbreak

The outbreak of the novel coronavirus (COVID-19) represents a significant and urgent threat to global health.

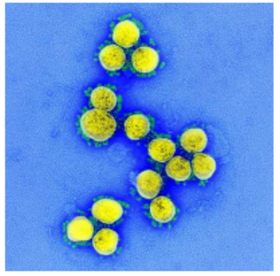
We call on researchers, journals and funders to ensure that research findings and data relevant to this outbreak are shared rapidly and openly to inform the public health response and help save lives.

We affirm the commitment to the principles set out in the 2016 Statement on data sharing in public health emergencies, and will seek to ensure that the World Health Organization (WHO) has rapid access to emerging findings that could aid the global response.

Specifically, we commit to work together to help ensure:

- all peer-reviewed research publications relevant to the outbreak are made immediately open access, or freely available at least for the duration of the outbreak
- research findings relevant to the outbreak are shared immediately with the WHO upon journal submission, by the journal and with author knowledge
- research findings are made available via preprint servers before journal publication, or via platforms that make papers openly accessible before peer review, with clear statements regarding the availability of underlying data
- researchers share interim and final research data relating to the outbreak, together with protocols and standards used to collect the data, as rapidly and widely as possible - including with public health and research communities and the WHO
- authors are clear that data or preprints shared ahead of submission will not pre-empt its publication in these journals

Public Health Emergency COVID-19 Initiative



Transmission electron micrograph of SARS-CoV-2 virus particles, isolated from a patient. Image captured and color-enhanced at the NIAID Integrated Research Facility (IRF) in Fort Detrick, Maryland. *NIAID*

On March 13, 2020, the National Science and Technology Advisors from a dozen countries, including the United States, called on publishers to voluntarily make their COVID-19 and coronavirus-related publications, and the available data supporting them, immediately accessible in PubMed Central (PMC) and other appropriate public repositories to support the ongoing public health emergency response efforts.

To date, more than fifty publishers (see Collaborators to the right) have responded to the call and volunteered to make their coronavirus-related articles accessible in PMC in formats and under license terms that facilitate text mining and secondary analysis. In addition, many other PMC journals and publishers make their coronavirus-related articles available the same way.

See the COVID-19 Initiative FAQ for more information, including details on scope and publisher eligibility.

Coronavirus-Related and COVID-19-Related Articles in PMC

Queries in PMC to find full-text journal articles relating to

- COVID-19 (all)

  Open Access only | Author Manuscripts only

- Coronaviruses broadly (historical and current literature) (all)

  Open Access only | Author Manuscripts only

You can append your own custom queries with "open access"[filter] or "author manuscript"[filter] as we have done to the queries above to identify articles that are currently available in PMC Text Mining Collections.

NLM encourages customization of the search queries suggested in the right-hand navigation bar to meet your specific research or information needs.

COLLABORATORS

American Association of Neurological Surgeons (AANS)

American Chemical Society

American Institute of Physics

American Medical Informatics Association

American Physical Society

American Society for Biochemistry and Molecular Biology

American Society of Mechanical Engineers (ASME)

American Society for Microbiology

American Society of Tropical Medicine and Hygiene

Annals of Internal Medicine, a publication of the American College of Physicians

The British Medical Journal (BMJ)

Bulletin of the World Health Organization

CORD-19
COVID-19 Open Research Dataset

The Semantic Scholar team at the Allen Institute for AI has partnered with leading research groups to provide CORD-19, a free resource of more than 130,000 scholarly articles about the novel coronavirus for use by the global research community.

Get Started

The CORD-19 corpus is now updated daily! Download Here

Discover New Insights About the Novel Coronavirus

Quickly explore the latest literature using these open tools built by the team at Allen Institute for AI.

Download CORD-19
The COVID-19 Open Research Dataset (CORD-19) is a growing resource of scientific papers on COVID-19 and related historical coronavirus research.

Download →

Adaptive Research Feed
Personalize your free AI-powered Research Feed to get coronavirus research recommendations.

Stay Up To Date →

Recent Research
Query the Semantic Scholar corpus for the latest CORD-19 research sorted by recency.

View Research →

SPIKE-CORD
A powerful sentence-level, context-aware, linguistically informed system for extracting important information from a large corpus of COVID-19 related text.

View SPIKE-CORD →

SciSight
Visually investigate associations between concepts appearing in the scientific literature contained in CORD-19.

View SciSight →

SciFact
Find out whether published scientific research supports or contradicts claims about COVID-19.

View SciFact →

PUBLICATIONS	DATASETS	GRANTS	PATENTS	CLINICAL TRIALS	POLICY DOCUMENTS
124,520	1,484	2,348	81	5,863	2,609

SOURCE TITLES

medRxiv	6,413
SSRN Electronic Journal	5,086
Research Square	3,782
arXiv	2,034
bioRxiv	1,891

OPEN ACCESS

All OA	101,254
Gold	71,300
Closed	23,266
Green, Published	18,830
Green, Accepted & Submitted	11,124

Funders

related to your search

About indicators

Aggregated | Timeline | Heatmap

Publications | Citations | Citations (Mean)
Indicator

Mean | Change

Export table

Organization Country	↓Publications	Citations	Citations mean
National Natural Science Foundation of China (NSFC) China	1,772	34,393	19.41
National Institute of Allergy and Infectious Diseases (... United States	717	19,304	27.62
Ministry of Science and Technology of the People's Re... China	637	18,715	29.38
European Commission (EC) Belgium	618	7,185	11.63
National Heart Lung and Blood Institute (NHLBI) United States	499	7,879	15.79
National Cancer Institute (NCI) United States	424	3,985	9.40
Wellcome Trust (WT) United Kingdom	417	9,487	22.75
National Institute of General Medical Sciences (NIGMS) United States	401	8,463	21.10
National Institute for Health Research (NIHR) United Kingdom	392	6,167	15.73

kaggle

Search

- Home
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- Discuss
- Courses
- More

COVID-19 Kaggle community contributions

COVID-19 data, tools and findings from the Kaggle community

The goal of this page is to bring together the most useful contributions from the Kaggle community's COVID-19 work into a single place.

Literature Review | Tools | Datasets

Literature Review

Using publications from the CORD-19 dataset (Last updated: 2020-06-08)
Covers 5.8% of the studies published since February 1 (1164 of the 20122 papers)

FEEDBACK

About This Review

These findings have been extracted from the CORD-19 papers by machine learning algorithms with a human curation overlay (process described in this thread). The results and quotes on this page should not be relied on without reading and assessing the validity of the underlying research. If you see a conclusion that is misrepresented, please use the feedback section of this page to report it.

This project is a part of the White House Office of Science and Technology Policy's call to action for the technology community and addresses research priorities defined by the National Academies and the World Health Organization.

This review can be useful for those wanting a quick overview of what the latest literature is saying on the topics we cover. It might also help those writing local guides, expert opinions or systematic reviews. Click on the topic in the table of contents below to see the results table for that topic.

Key Scientific Questions about COVID-19

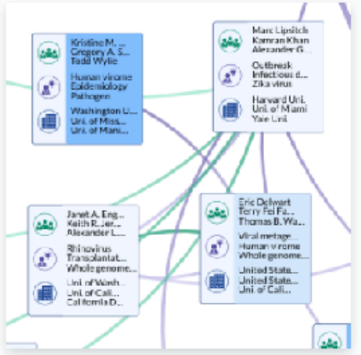
AI2 Allen Institute for AI

SciSight

- About
- Network of science
- Faceted search
- Proteins/genes/cells
- Diseases/chemicals

SciSight is a tool for exploring the evolving network of science in the COVID-19 Open Research Dataset, from Semantic Scholar at the Allen Institute for AI.

Our goal is to help accelerate scientific research, with tools to visualize the emerging literature network around COVID-19. Use our exploratory search tools to find out what groups are working on what directions, see how biomedical concepts interact and evolve over time, and discover new connections.



Network of science

Explore the progress being made against COVID-19, with a visualization of research groups and their ties.

Explore Network →

Faceted paper search

See how authors and topics interact over time with this exploratory faceted search tool.

Explore Facets →

Co-mentions of proteins/genes/cells

Explore associations between proteins/genes/cells concepts appearing in the dataset.

Explore proteins/genes/cells →

COVID-19 Antibody Seroprevalence in Santa Clara County, California

Eran Bendavid, Bianca Mulaney, Neeraj Sood, Soleil Shah, Emilia Ling, Rebecca Bromley-Dulfano, Cara Lai, Zoe Weissberg, Rodrigo Saavedra-Walker, James Tedrow, Dona Tversky, Andrew Bogan, Thomas Kupiec, Daniel Eichner, Ribhav Gupta, John Ioannidis, Jay Bhattacharya

doi: https://doi.org/10.1101/2020.04.14.20062463

This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.

Abstract

Background Addressing COVID-19 is a pressing health and social concern. To date, many epidemic projections and policies addressing COVID-19 have been designed without seroprevalence data to inform epidemic parameters. We measured the seroprevalence of antibodies to SARS-CoV-2 in a community sample drawn from Santa Clara County. Methods On April 3-4, 2020, we tested county residents for antibodies to SARS-CoV-2 using a lateral flow immunoassay. Participants were recruited using Facebook ads targeting a sample of individuals living within the county by demographic and geographic characteristics. We estimate weights to adjust our sample to match the zip code, sex, and race/ethnicity distribution within the county. We report both the weighted and unweighted prevalence of antibodies to SARS-CoV-2. We also adjust for test performance characteristics by combining data from 16 independent samples obtained from manufacturer's data, regulatory submissions, and independent evaluations: 13 samples for specificity (3,324 specimens) and 3 samples for sensitivity (157 specimens). Results The raw prevalence of antibodies to SARS-CoV-2 in our sample was 1.5% (exact binomial 95CI 1.1-2.0%). Test performance specificity in our data was 99.5% (95CI 99.2-99.7%) and sensitivity was 82.8% (95CI 76.0-88.4%). The unweighted prevalence adjusted for test performance characteristics was 1.2% (95CI 0.7-1.8%). After weighting for population demographics of Santa Clara County, the prevalence was 2.8% (95CI 1.3 4.7%), using bootstrap to estimate confidence bounds. These prevalence point estimates imply that 54,000 (95CI 25,000 to 91,000 using weighted prevalence; 23,000 with 95CI 14,000-35,000 using unweighted prevalence) people were infected in Santa Clara County by early April, many more than the approximately 1,000 confirmed cases at the time of the survey. Conclusions The estimated population prevalence of SARS-CoV-2 antibodies in Santa Clara County

Posted April 30, 2020.

The New York Times

'Truly Sorry': Scientists Pull Panned Lancet Study of Trump-Touted Drug

By Reuters

June 5, 2020

NEW YORK/LONDON — An influential study that found hydroxychloroquine increased the risk of death in COVID-19 patients has been withdrawn a week after it led to major trials being halted, adding to confusion about a malaria drug championed by U.S. President Donald Trump.

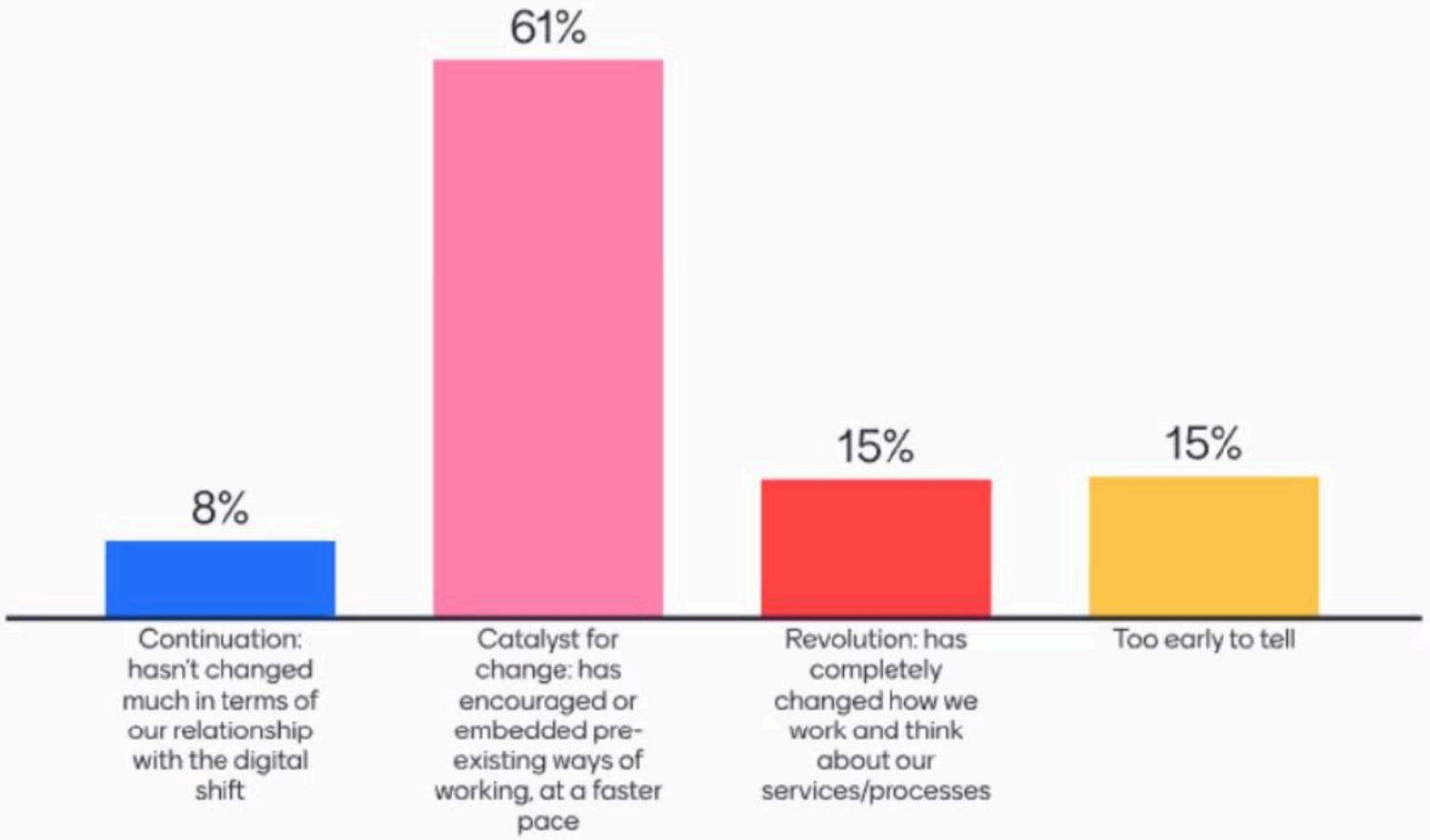
The Lancet medical journal pulled the study after three of its authors retracted it, citing concerns about the quality and veracity of data in it. The World Health Organization (WHO) will resume its hydroxychloroquine trials after pausing them in the wake of the study. Dozens of other trials have resumed or are in process.

The three authors said Surgisphere, the company that provided the data, would not transfer the dataset for an independent review and they "can no longer vouch for the veracity of the primary data sources."

The fourth author of the study, Dr. Sapan Desai, chief executive of Surgisphere, declined to comment on the retraction.

RESPOND
Manage continuity
RECOVER
Learn and emerge stronger
THRIVE
Prepare for the next normal

Q3: Within your organisation, to what extent has the Covid-19 crisis acted as a:



https://www.rluk.ac.uk/digital-shift-manifesto-launch/

CMU open access agreements

ELSEVIER

First institutional agreement for Elsevier - for all CMU corresponding authors

1 JAN 2020

ACM

Agreement via ACM Open - aims to move all journals to OA

1 JAN 2020

PLOS

Our largest open access only publisher

1 JULY 2020

IN THE WORKS

Active negotiations with another major society

2020+

NATIONAL ARCHIVES
FEDERAL REGISTER
The Daily Journal of the United States Government

Notice

Request for Information: Public Access to Peer-Reviewed Scholarly Publications, Data and Code Resulting From Federally Funded Research

A Notice by the Science and Technology Policy Office on 03/31/2020

PUBLISHED DOCUMENT

AGENCY:

Office of Science and Technology Policy (OSTP).

ACTION:

Notice of Request for Information (RFI), extension of comment period.

SUMMARY:

OSTP, and the National Science and Technology Council's (NSTC) Subcommittee on Open Science (SOS), are engaged in ongoing efforts to facilitate implementation and compliance with the 2013 memorandum *Increasing Access to the Results of Federally Funded Scientific Research* and to address recommended actions made by the Government Accountability Office in a November 2019 report. OSTP and the SOS continue to explore opportunities to increase access to unclassified published research, digital scientific data, and code supported by the U.S. Government. This RFI aims to provide all interested individuals and organizations with the opportunity to provide recommendations

DOCUMENT DETAILS

Printed version:
PDF

Publication Date:
03/31/2020

Agency:
Office of Science and Technology Policy

Dates:
The comment period for the request for information published February 19, 2020, at 85 FR 9488, is extended. Comments will be accepted until 11:59 p.m. ET on May 6, 2020.

Comments Close:
05/06/2020

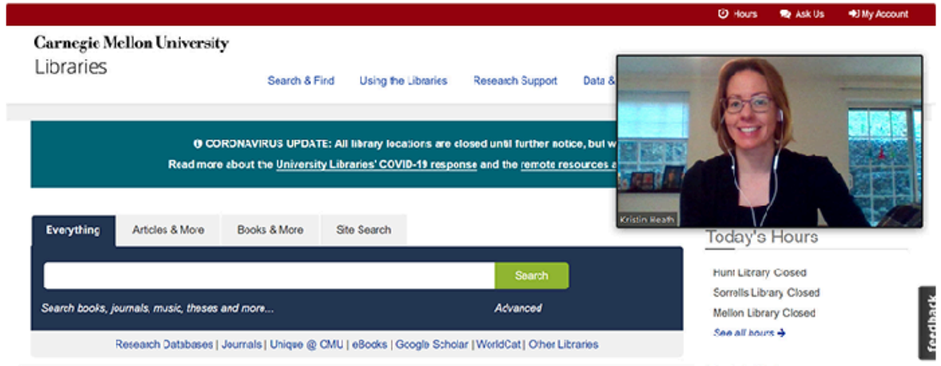
Document Type:
Notice

Document Citation:
85 FR 17907

CORONAVIRUS UPDATE: All library locations are closed until further notice, but we are here to support you.
Read more about the University Libraries' COVID-19 response and the remote resources and assistance that we provide.

The Information Environment

Supporting Music Teaching and Learning During COVID-19



I was curious how our e-resources would support music teaching and learning when classes moved online. While the circumstances we are in right now are not ideal, they have forced me to look at how I use online resources differently and if they really are meeting needs of the School of Music.

Dr. Alexa Woloshyn, assistant professor of Musicology, sent me about twelve topics students were researching in her Music History III course so I could put our resources to the test. I spent time on each one and was able to find a good selection of online books and full-text journal articles for all of them.

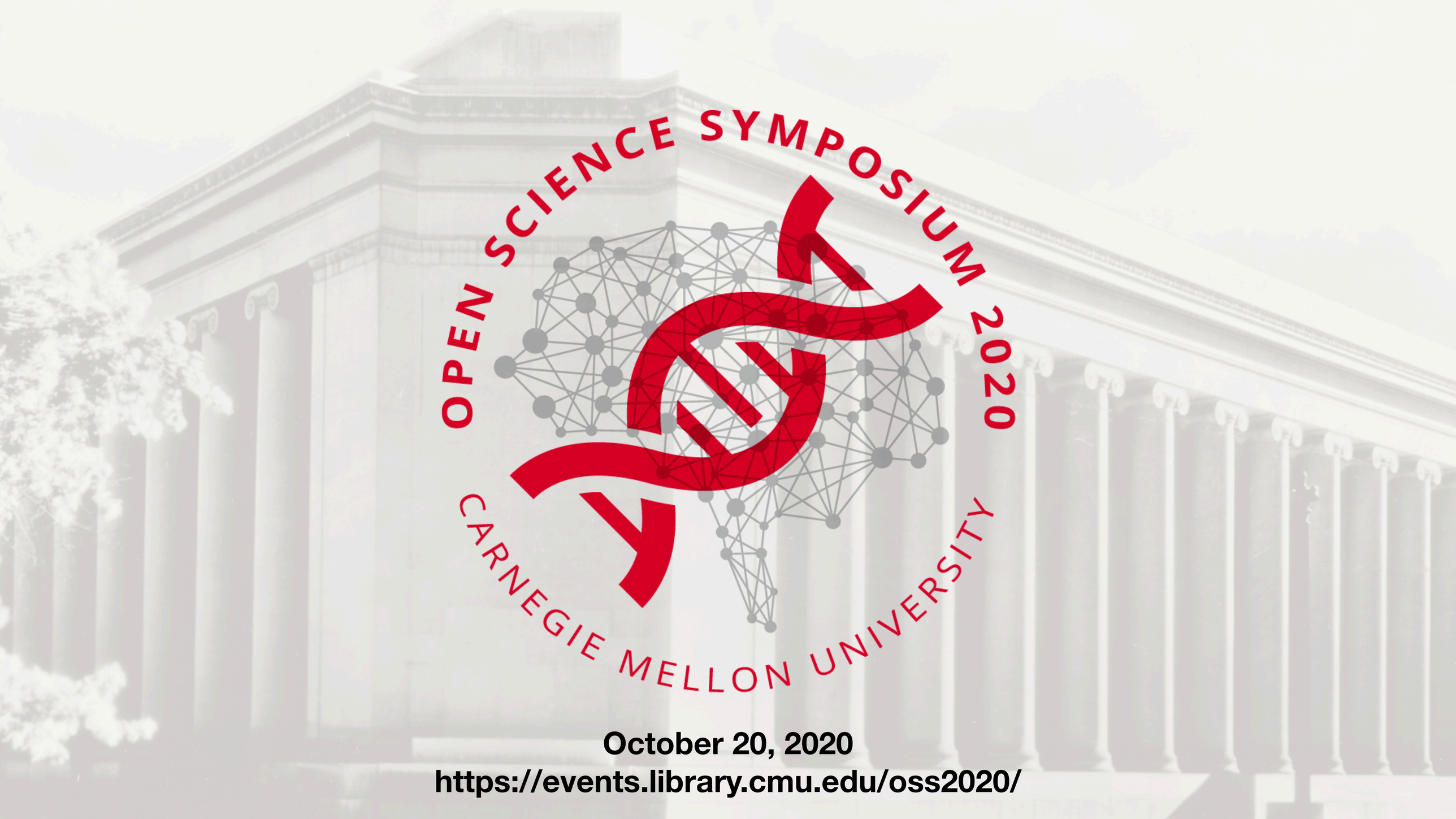
My go-to music research databases are the library catalog, Worldcat, Grove Music Online, Music Index, RILM Music Abstracts, JSTOR, and ProQuest. In the past I would have bypassed the Everything tab on our library home page and gone straight for the Books & More option, but I found myself relying heavily on the Everything search for results (something students were already doing) since losing access to the print collection.

Blog Channels

Back in the Stacks
The Information Environment
Intrepid Research & Learning
Open Science at CMU
SCONE
Scotty Tales
Tartan Datascapes

October 19, 2020

https://events.library.cmu.edu/aidr2020/



October 20, 2020

https://events.library.cmu.edu/oss2020/

Carnegie Mellon University

kgw@cmu.edu

cmkeithw

Keith Webster

cmkeithw