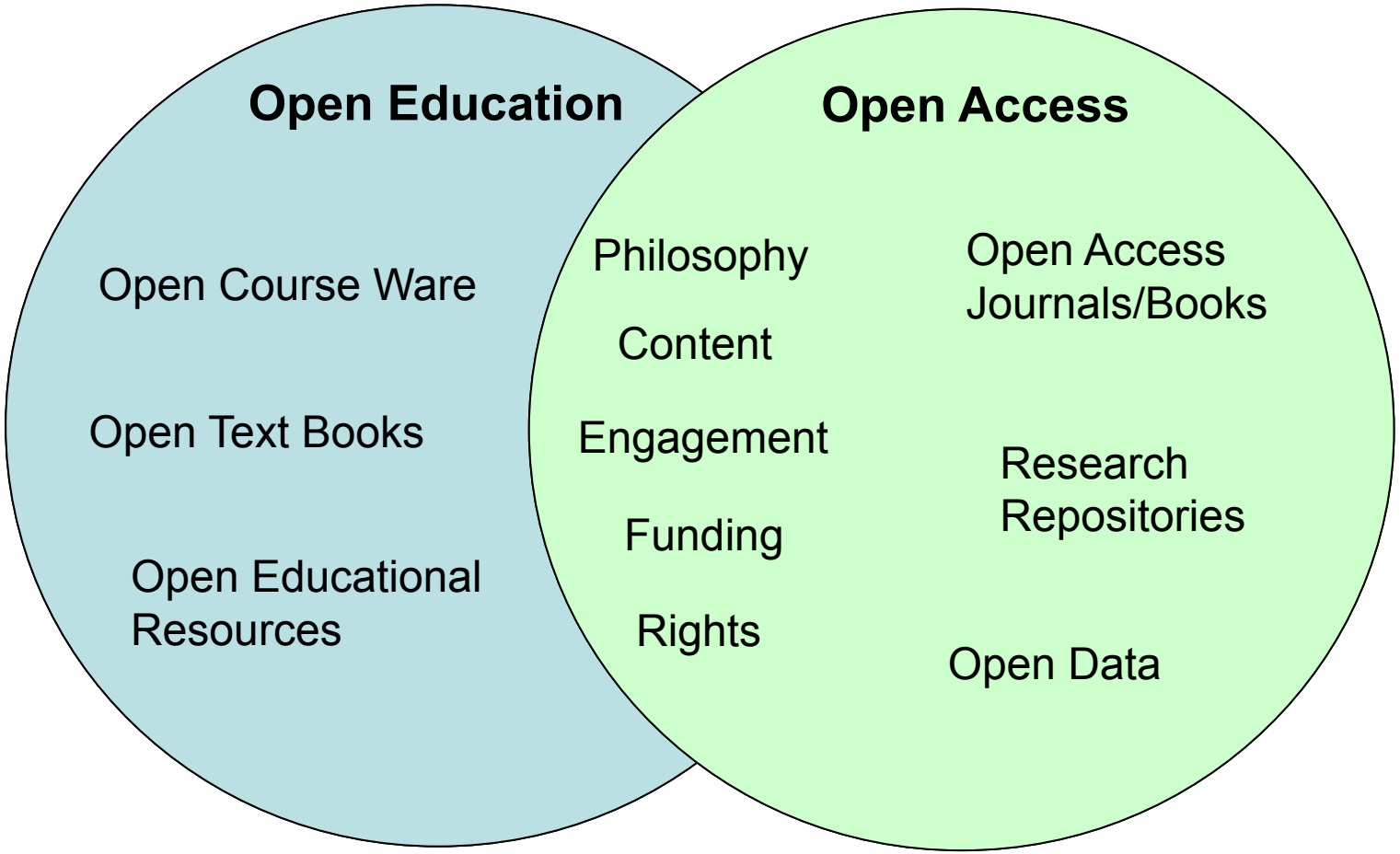
Open Access, Open Education, Open Minds

Lisa Goddard
Memorial University Libraries

edge 2010

October 13th, 2010

Outline


Open Education
Open Course Ware
Open Text Books
Open Educational Resources
Open Access
Philosophy
Content
Engagement
Funding
Rights
Open Access Journals/Books
Research Repositories
Open Data

Open Educational Resources

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Learning Objects

Materials Types

Activities & Labs	(7993)	Readings	(8966)
Assessments	(1754)	Simulations	(775)
Audio Lectures	(2314)	Syllabi	(5900)
Curriculum Standards	(5265)	Teaching & Learning Strategies	(2414)
Discussion Forums	(72)	Textbooks	(255)
Games	(360)	Training Materials	(345)
Homework & Assignments	(3000)	Video Lectures	(2803)
Lecture Notes	(1855)	Other	(2540)
Lesson Plans	(3576)		

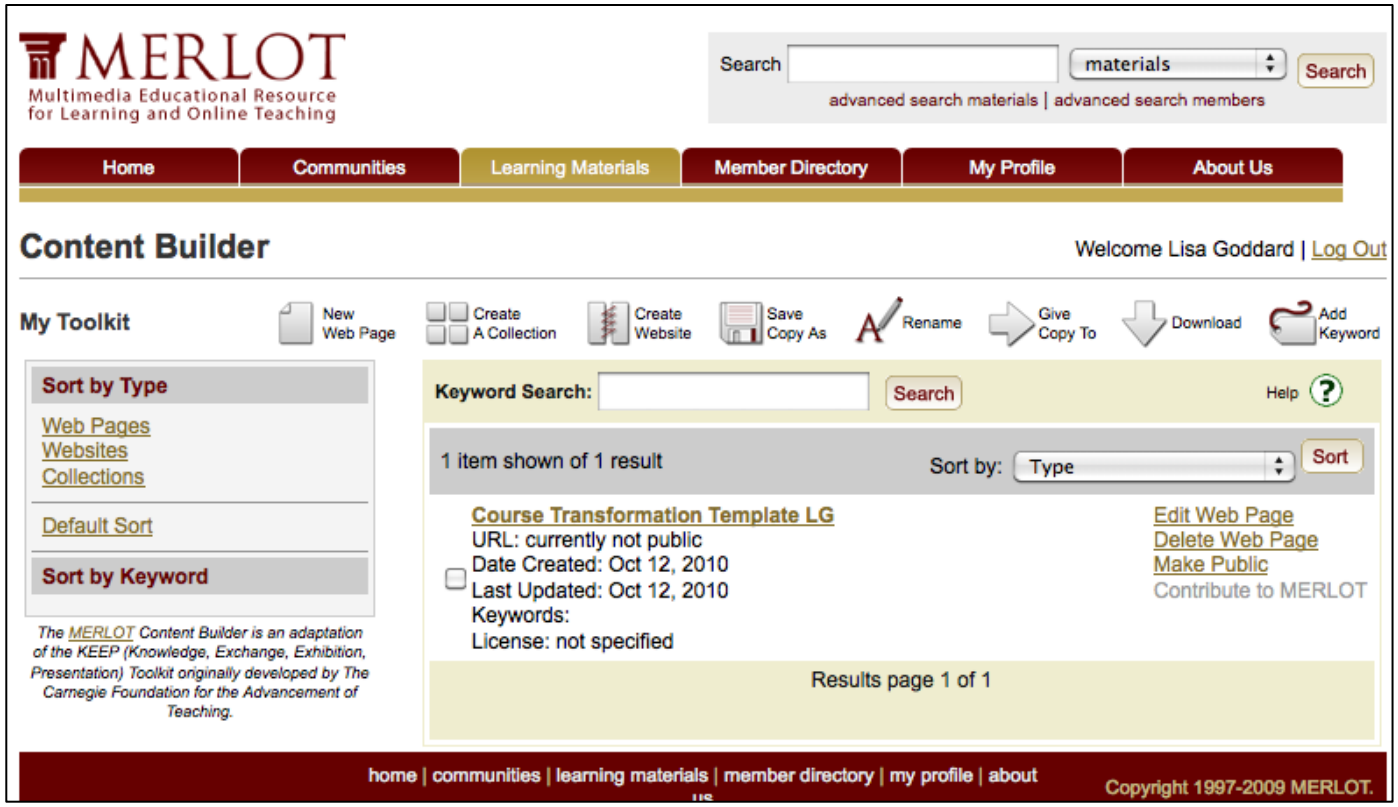
Course Related Materials (28092)

Full Course	(3603)
Learning Module	(24384)
OpenCourseWare	(2440)

Libraries and Collections (2545)

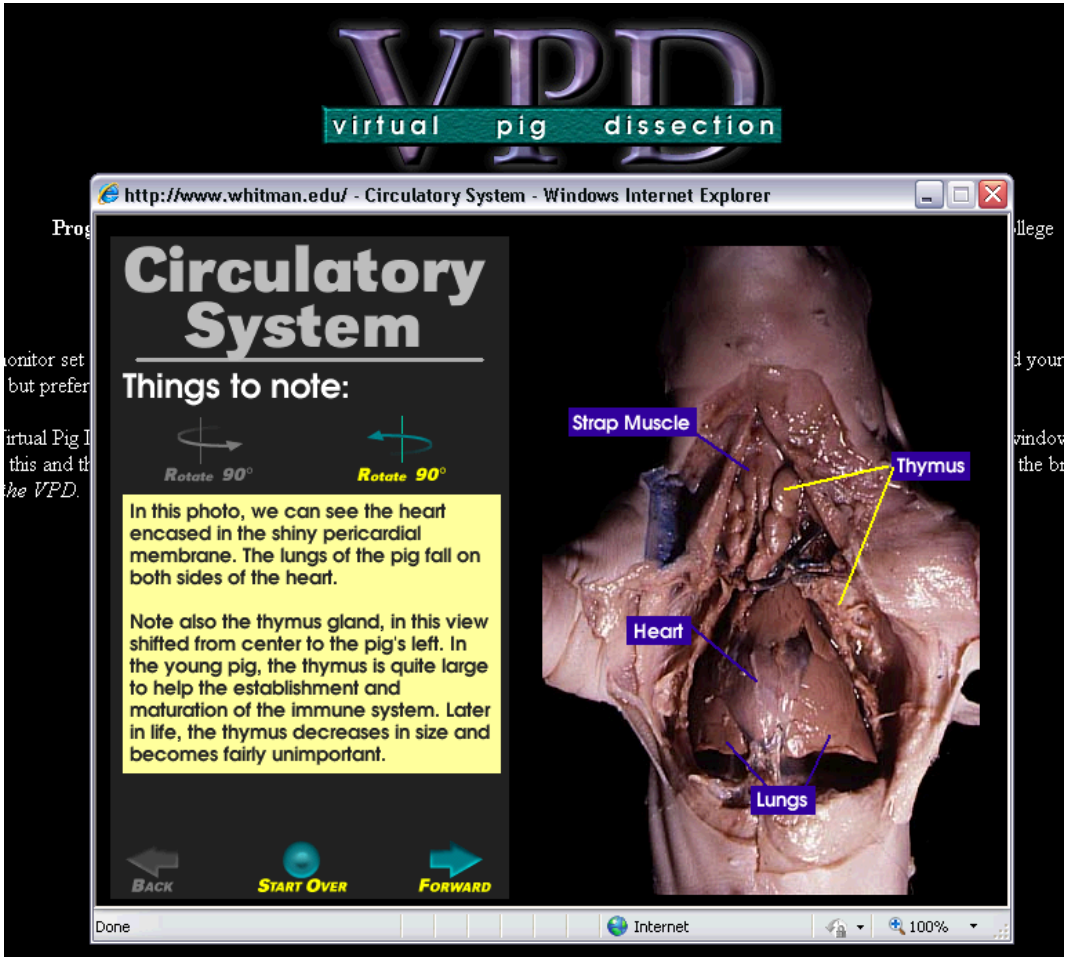
Primary Source	(1704)
Teaching & Learning Strategies	(454)
Other	(191)

Modular



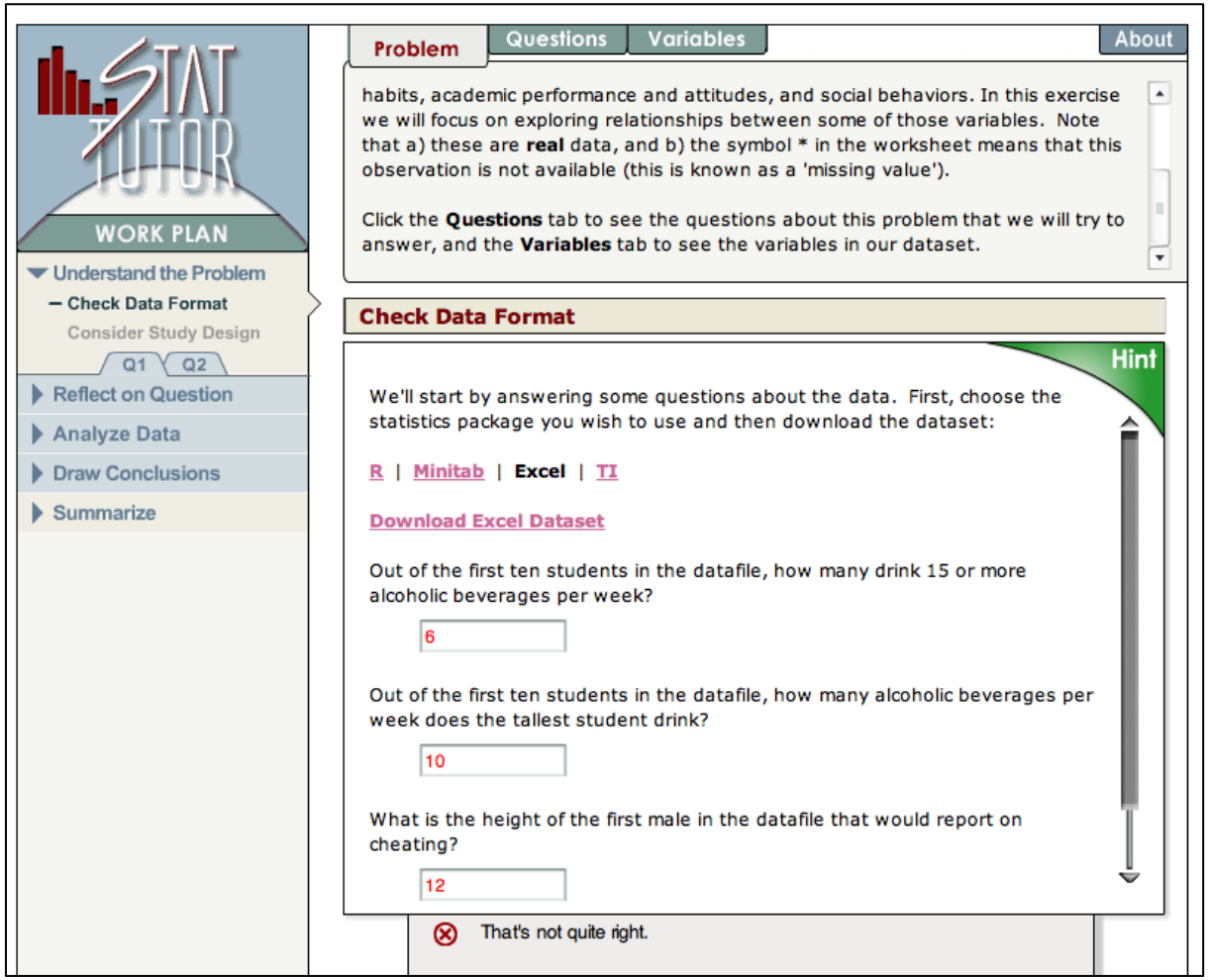
Merlot Content Builder – create custom course by plugging in peer-reviewed learning objects.

Multimedia



support many learning styles

Interactive

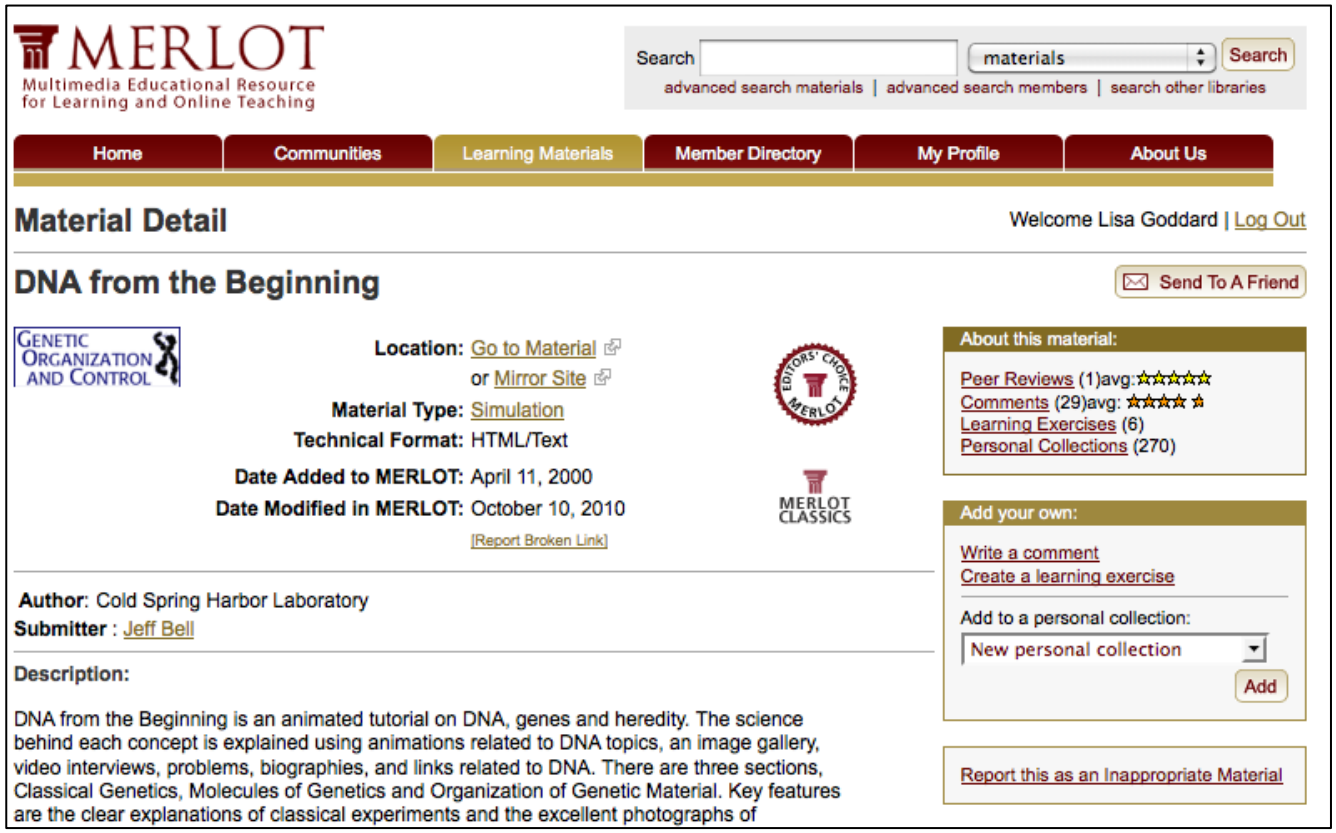


immediate feedback & assessment

Free for Use and Reuse

Jorum Open CC Licenses

Collaborative Development



Peer-review, comments, corrections, additions = continuous improvement

Communities of Interest

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April 2009

When first directed to the User page of **Rima Al Eryani** you will be taken by her exemplary use of colors and activities it becomes apparent that her passion for literacy, particularly in her home country of Yemen, is one Eryani as the April 2009 featured user page. Check out her user page, and celebrate the number of WikiEdu Congratulations, Rima.

March 2009

Having a wealth of experience and exemplary credentials **Dilip P. Barad, Ph.D** has steadily increased his pa is also an excellent ambassador for WikiEducator as he frequently speaks of the benefits of accessing and i excellent user page that showcases how text, photos and rich media can be used to portray information and the March 2009 featured user page recipient.

February 2009

For someone whose first edit was November 06, 2008 and has quickly climbed to be one of the top 20 active as the February 2009 featured user page. Check out her user page, it's colorful and comprehensive and incl media and formatting for mathematics.

connect educators with one another across regions & disciplines

Open Course Ware

MIT Open Courseware

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MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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- Syllabus
- Lecture Notes
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Home > Courses > Earth, Atmospheric, and Planetary Sciences > Modeling Environmental Complexity > Course Home

12.086 / 12.586 Modeling Environmental Complexity

As taught in: Fall 2008

A microbial community growing in the runoff of a hot spring in Yellowstone National Park. The interplay of microbial growth and the flow of water produces brilliant patterns. (Image courtesy of Kate Harris. Used with permission.)

Level:
Undergraduate / Graduate

Instructors:
Prof. Daniel Rothman

Course Features
Course Description
Technical Requirements

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"I believe in making knowledge available and accessible to help improve humanity as a whole."

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Student
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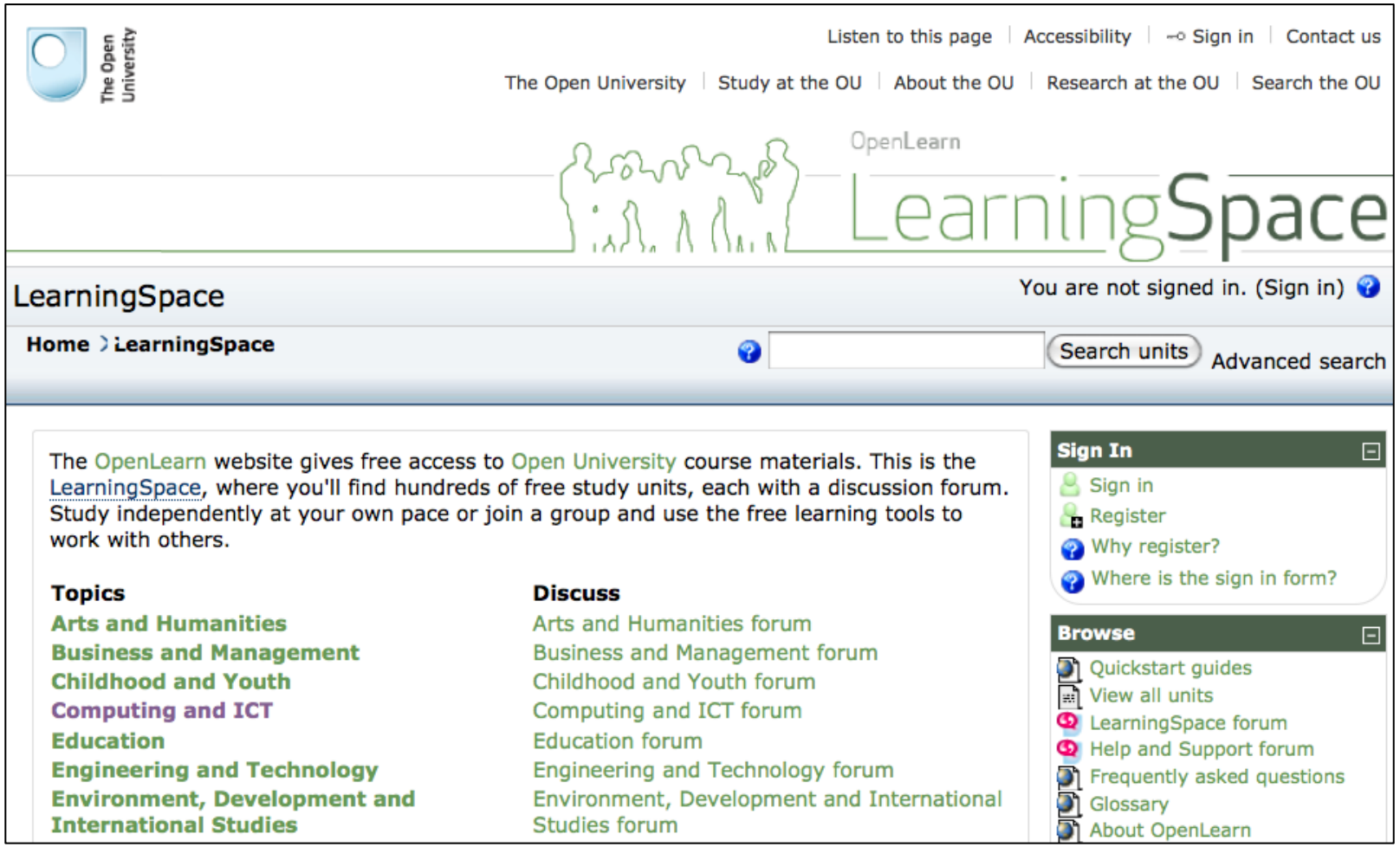
Course Features

- Lecture notes
- Assignments (no solutions)

Course Description

This course provides an introduction to the study of environmental phenomena that exhibit both organized structure and wide variability—i.e., complexity. Through

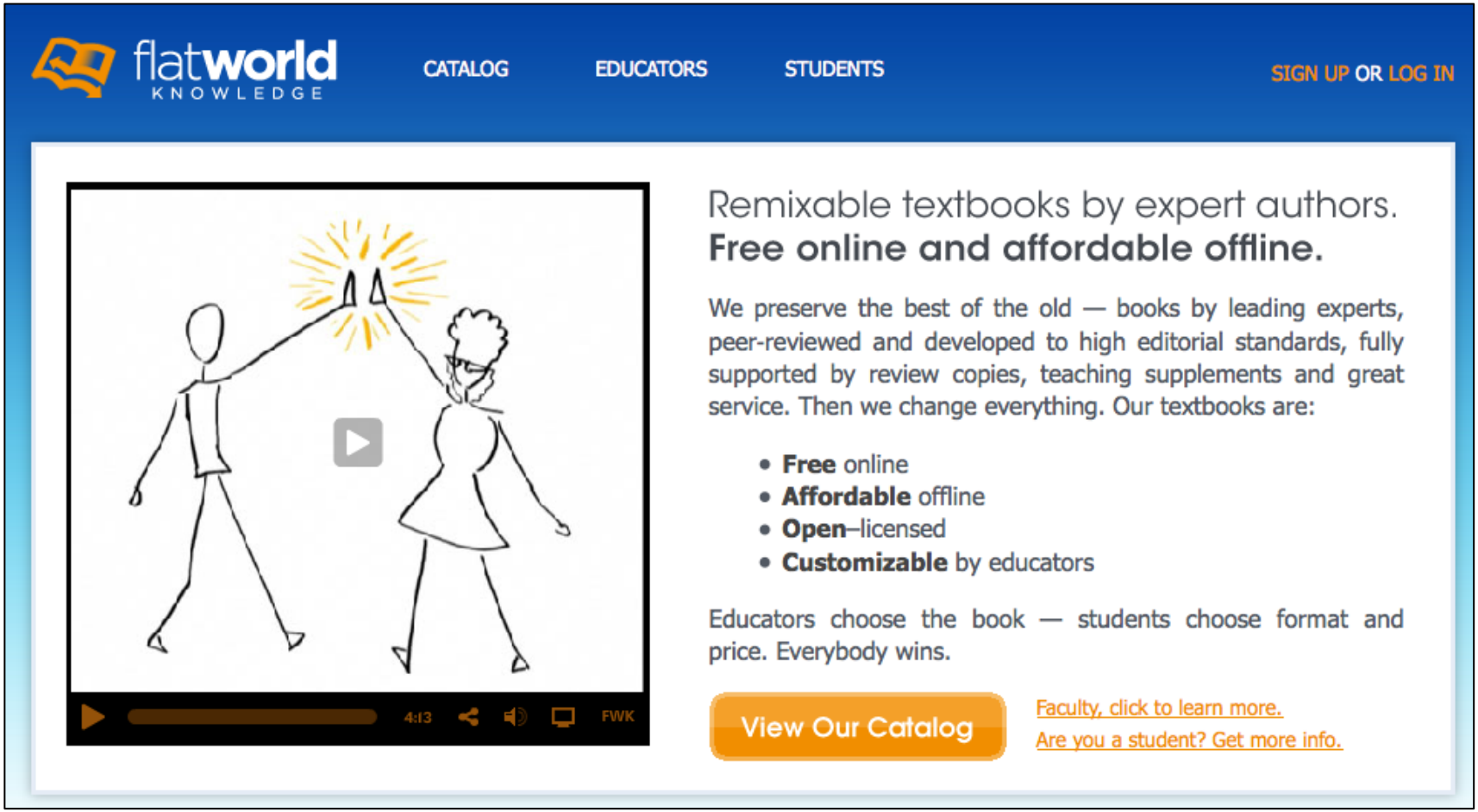
OpenLearn - Open University



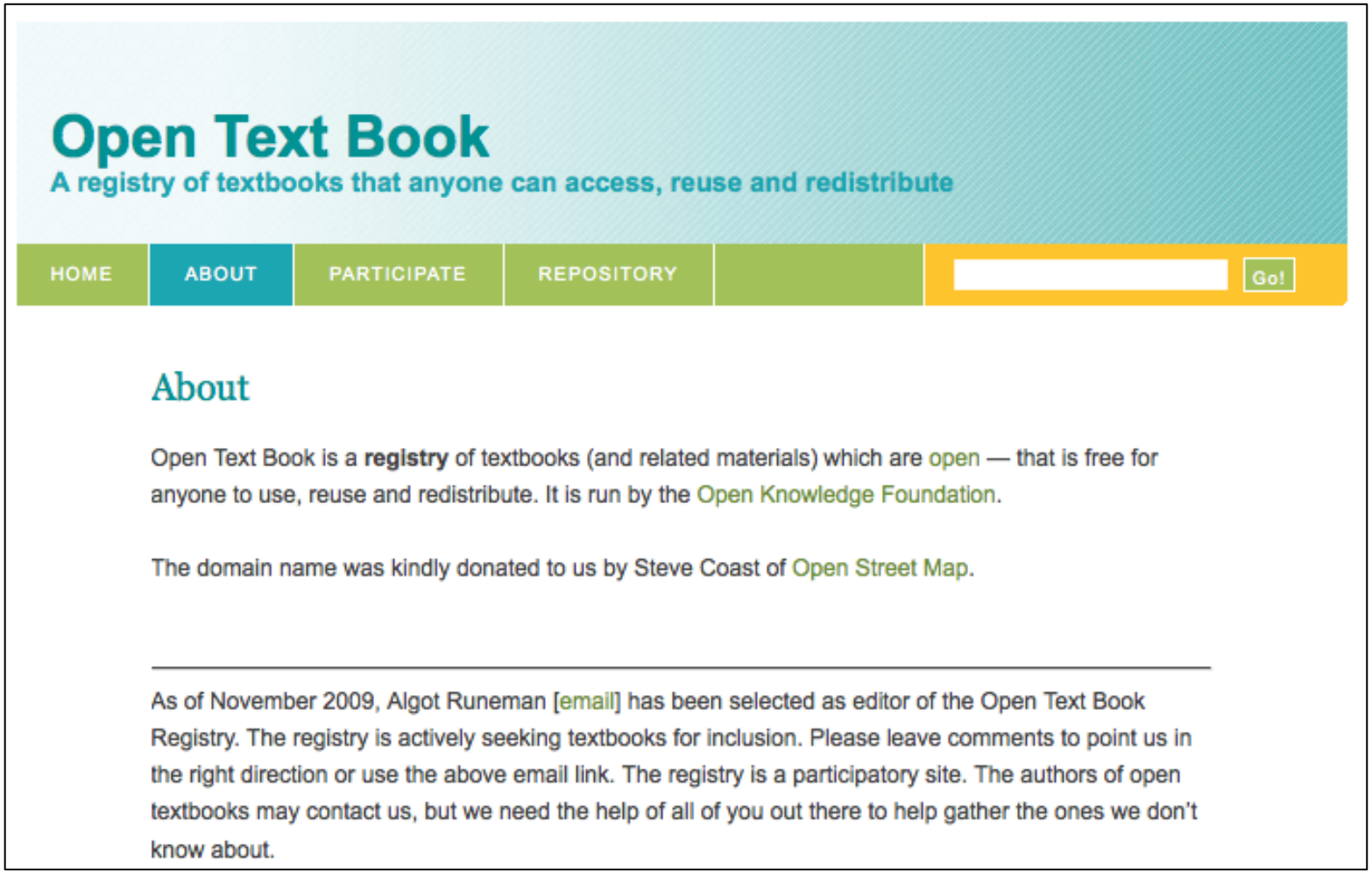
International OCW

Open Text Books

Flatworld Knowledge



OpenTextBook.org



Open Education Challenges

Funding Models

On average every course we publish costs us about $10,000 to $15,000. (MIT OCW)

Rights

One of the most significant barriers to OER development is the need to obtain permission from the holders of the relevant intellectual property rights.

(Committee for Economic Development, 2009)

Faculty Engagement

The success of curricular resource strategies depends on faculty willingness to openly share their intellectual property by contributing it to open educational resource sites.

(Bell, 2010)

Open Access

A Quick Definition

"Open access is the principle that publicly funded research should be accessible online, for free, immediately after publication."

University Environment

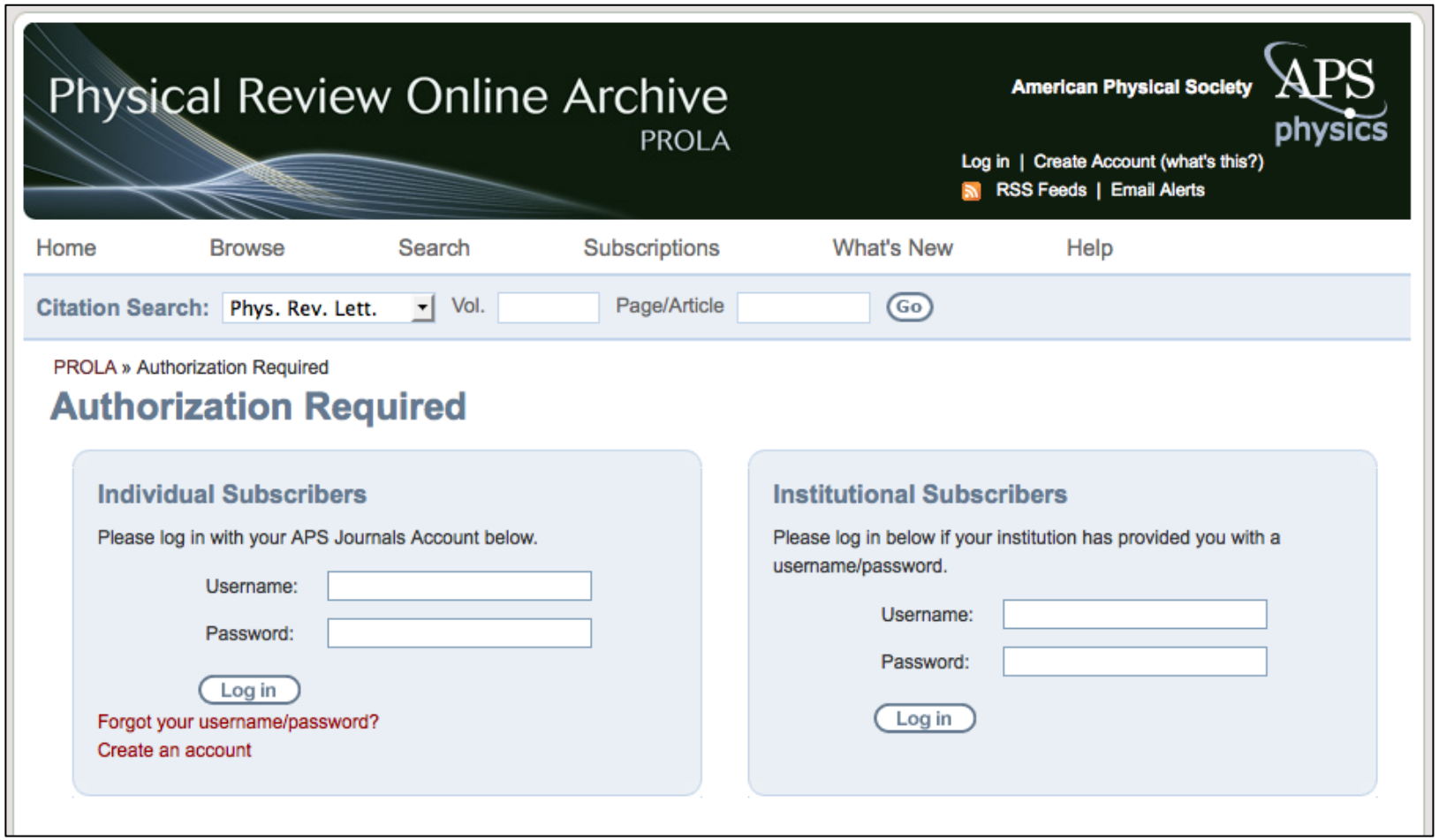
- **Typically, when someone pays you to do work, copyright is transferred to the employer.**

- **Most universities have agreements stating that faculty own copyright in their scholarly works.**

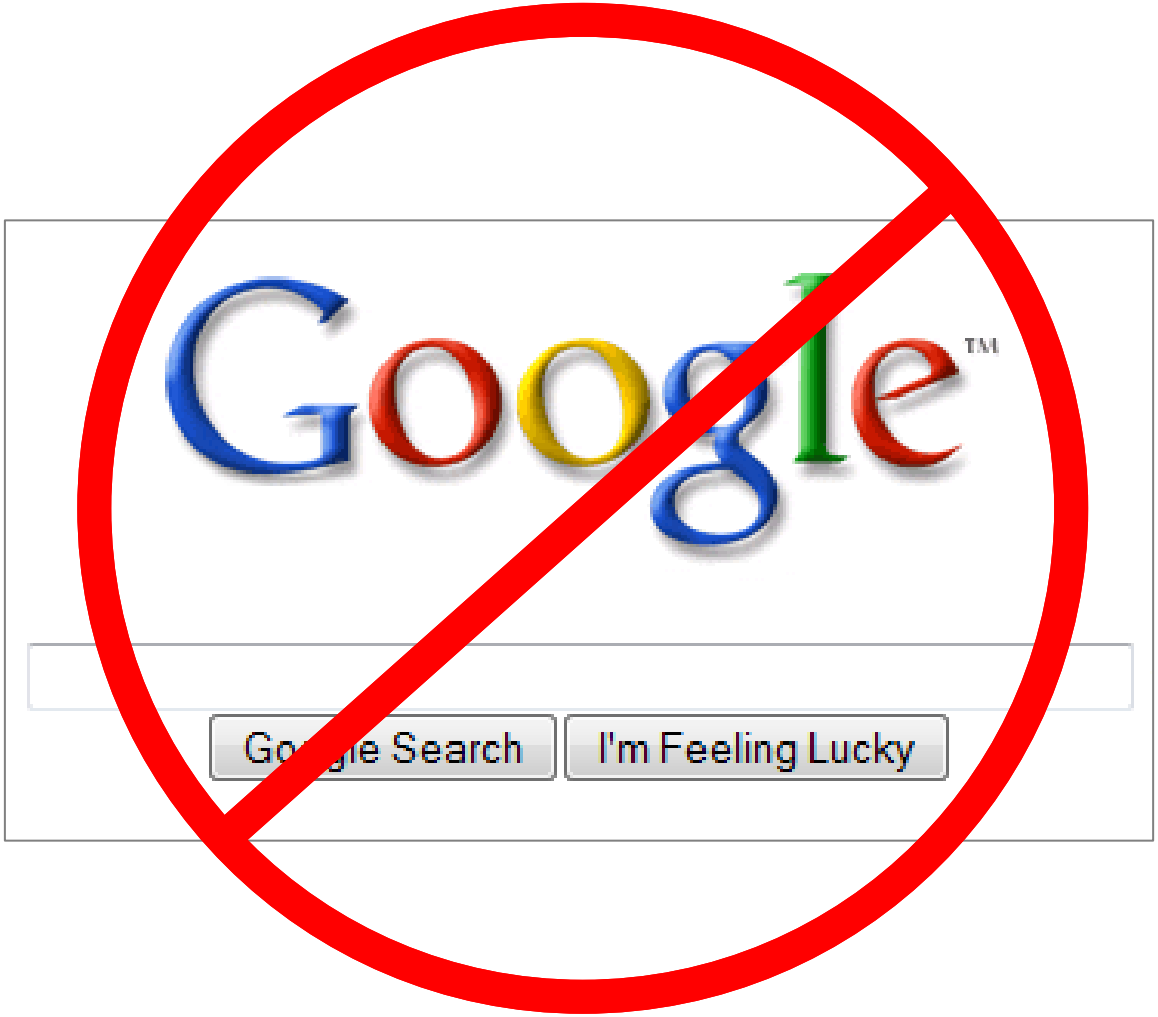
Publisher Agreements

- Academic authors traditionally transfer exclusive, full copyrights to the publishers of the journals in which their articles appear.
- Many disadvantages to this approach…

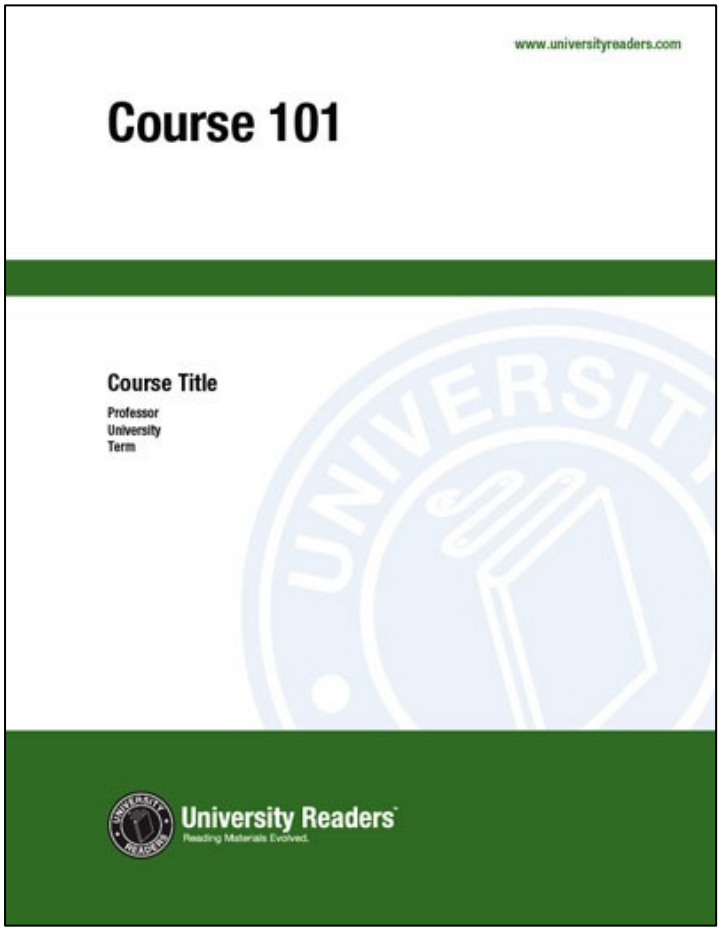
Subscribers Only



No Google



No Course Packs



No Course Websites

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MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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SHARE

Home > Courses > Earth, Atmospheric, and Planetary Sciences > Modeling Environmental Complexity > Course Home

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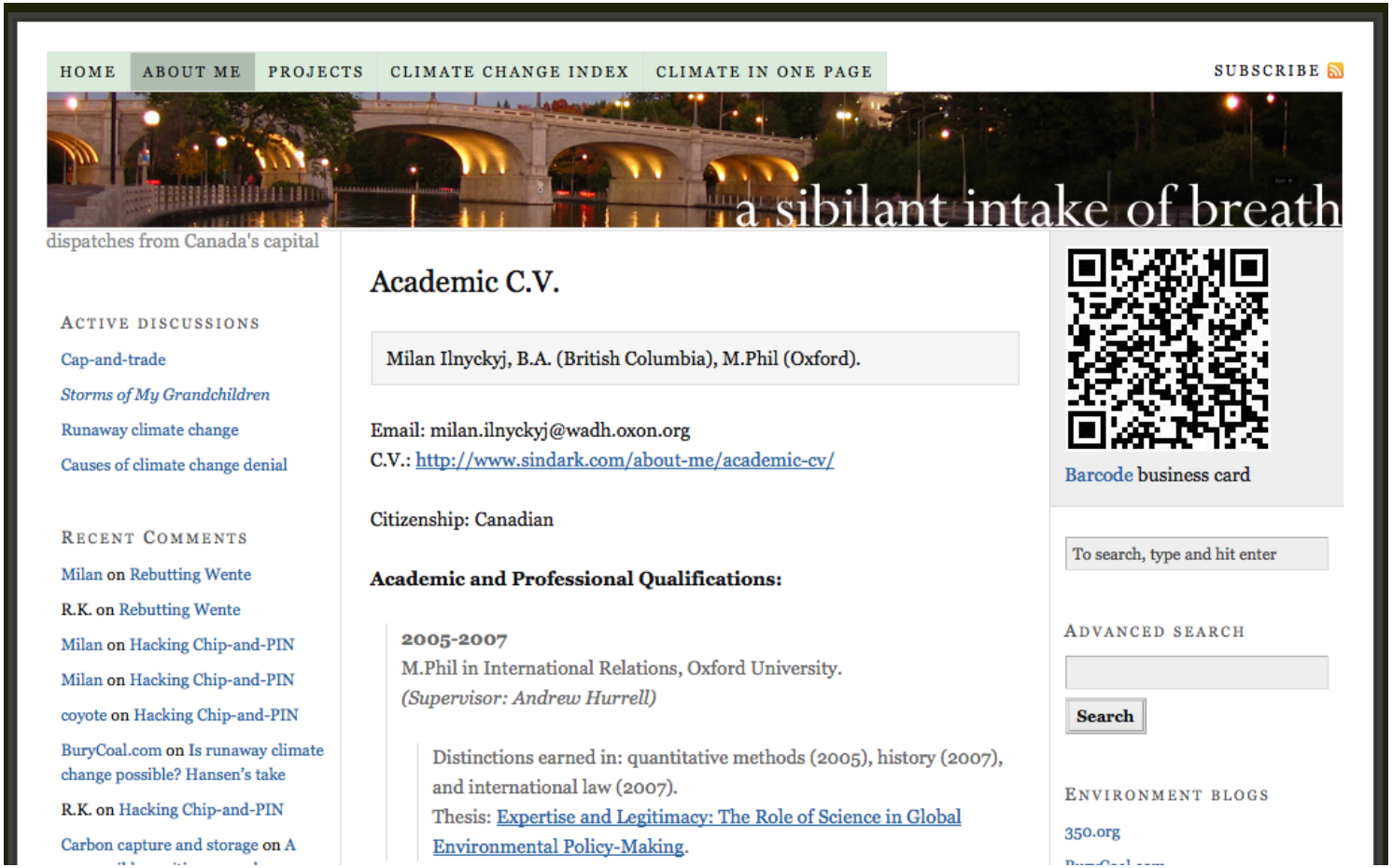
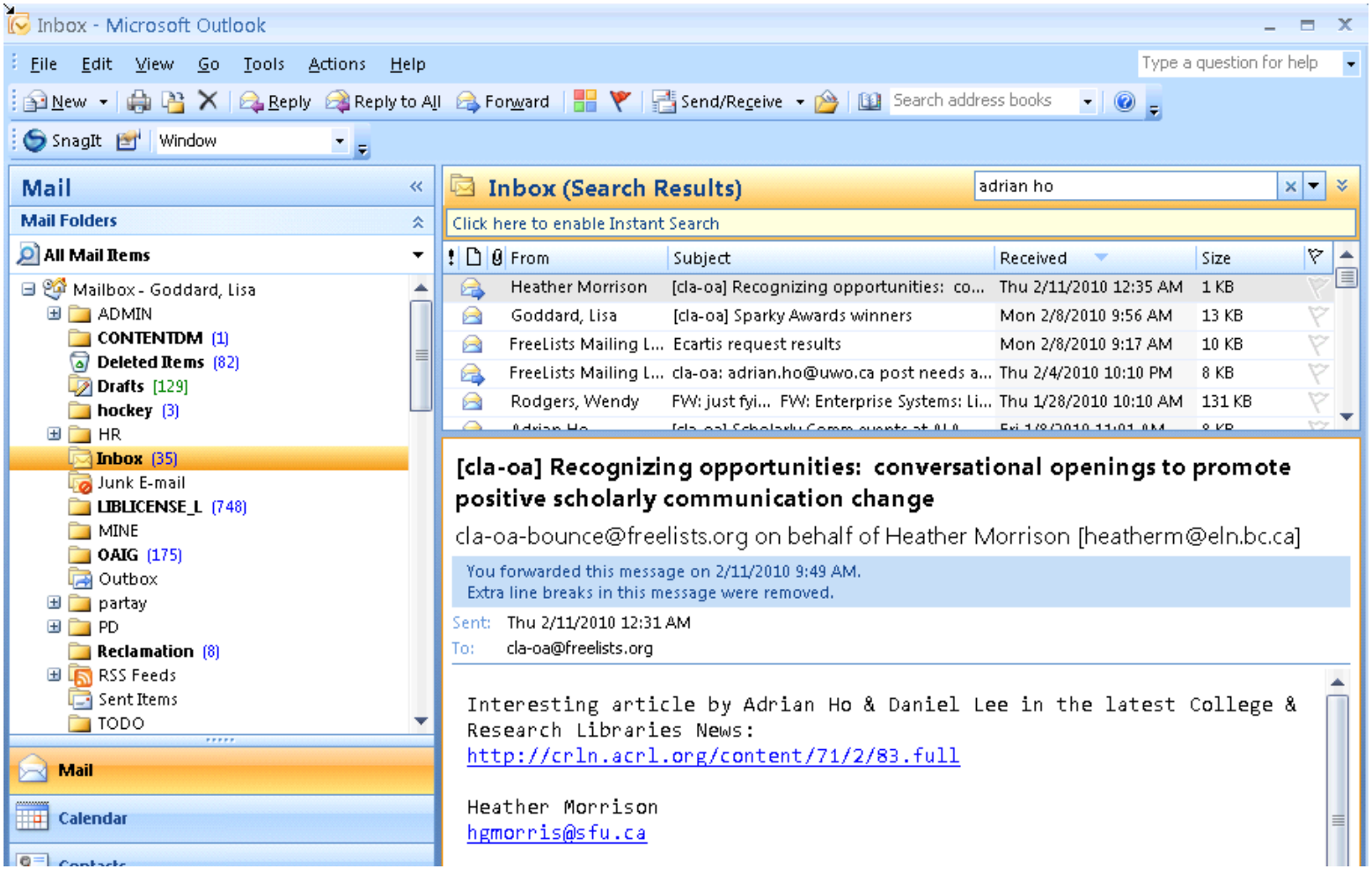
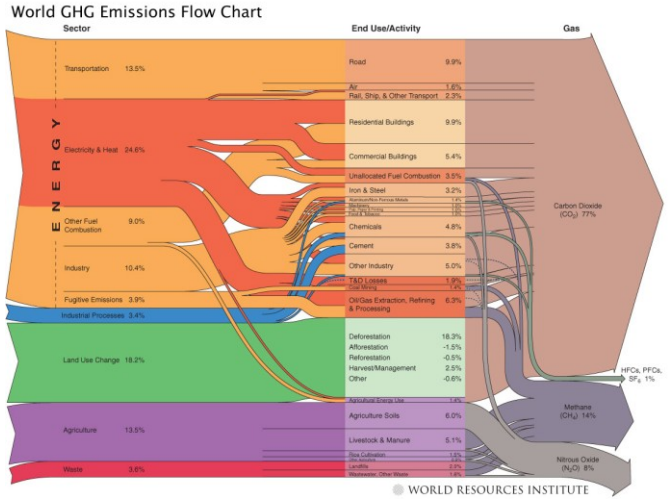
No Professional Websites



No Sharing with Colleagues



No Reuse



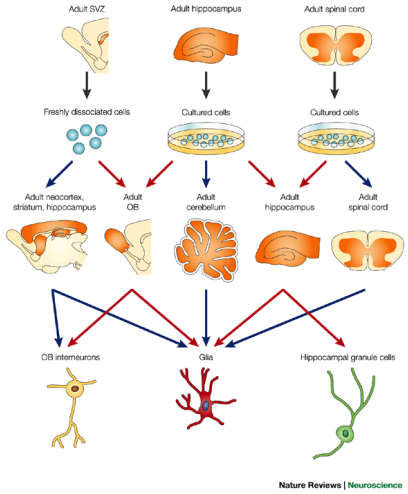


Table 1: Occupants and Nonoccupants Killed and Injured in Traffic Crashes

Description	Killed				Injured			
	2007	2008	Change	% Change	2007	2008	Change	% Change
Total*	41,259	37,261	-3,998	-9.7%	**2,491,000**	**2,346,000**	**-145,000**	**-5.8%**
Occupants								
Passenger Vehicles	29,072	25,351	-3,721	-13%	**2,221,000**	**2,072,000**	**-149,000**	**-6.7%**
Passenger Cars	16,614	14,587	-2,027	-12%	**1,379,000**	**1,304,000**	**-75,000**	**-5.4%**
Light Trucks	12,458	10,764	-1,694	-14%	**841,000**	**768,000**	**-73,000**	**-8.7%**
Large Trucks	805	677	-128	-16%	23,000	23,000	0	0.0%
Motorcycles	5,174	5,290	+116	+2.2%	103,000	96,000	-7,000	-6.8%
Nonoccupants								
Pedestrians	4,699	4,378	-321	-6.8%	70,000	69,000	-1,000	-1.4%
Pedalcyclists	701	716	+15	+2.1%	**43,000**	**52,000**	**+9,000**	**+21%**
Other/Unknown	158	188	+30	---	10,000	9,000	-1,000	---

Source: Fatalities - FARS 2007 (Final), 2008 (ARF), Injured - NASS GES 2007, 2008 Annual Files
* Total includes occupants of buses and other/unknown occupants not shown in table.
Changes in injury estimates shown in bold are statistically significant.

Copyrighted Material

CHAPTER 1

What Is the Semantic Web?

This book is about something we call the Semantic Web. From the name, you can probably guess that it is related somehow to the famous World Wide Web (WWW) and that it has something to do with semantics. Semantics, in turn, has to do with understanding the nature of meaning, but even the word *semantics* has a number of meanings. In what sense are we using the word *semantics*? And how can it be applied to the Web?

This book is also about a working ontologist. That is, the aim of this book is not to motivate or pitch the Semantic Web but to provide the tools necessary for working with it. Or, perhaps more accurately, the World Wide Web Consortium (W3C) has provided these tools in the forms of standard Semantic Web languages, complete with abstract syntax, model-based semantics, reference implementations, test cases, and so forth. But these are like a craftsman's tools: In the hands of a novice, they can produce clumsy, ugly, barely functional output, but in the hands of a skilled craftsman, they can produce works of utility, beauty, and durability. It is our aim in this book to describe the craft of building Semantic Web systems. We go beyond coverage of the fundamental tools to show how they can be used together to create semantic models, sometimes called *ontologies*, that are understandable, useful, durable, and perhaps even beautiful.

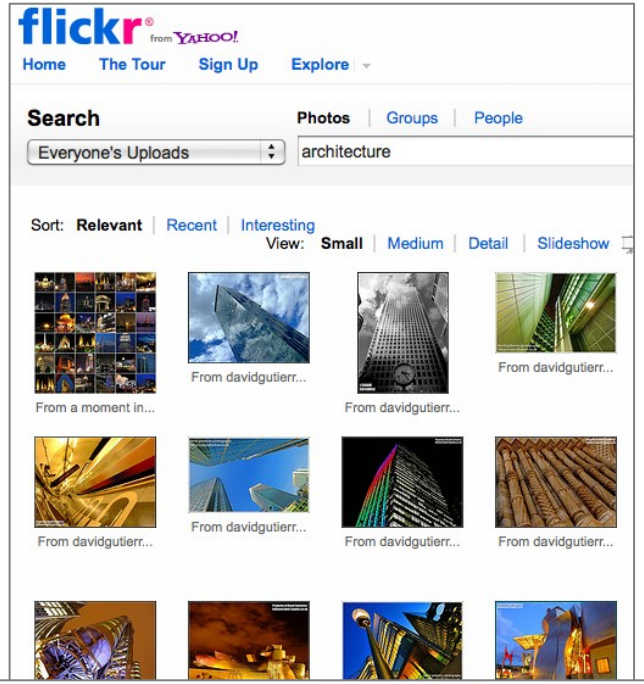
WHAT IS A WEB?

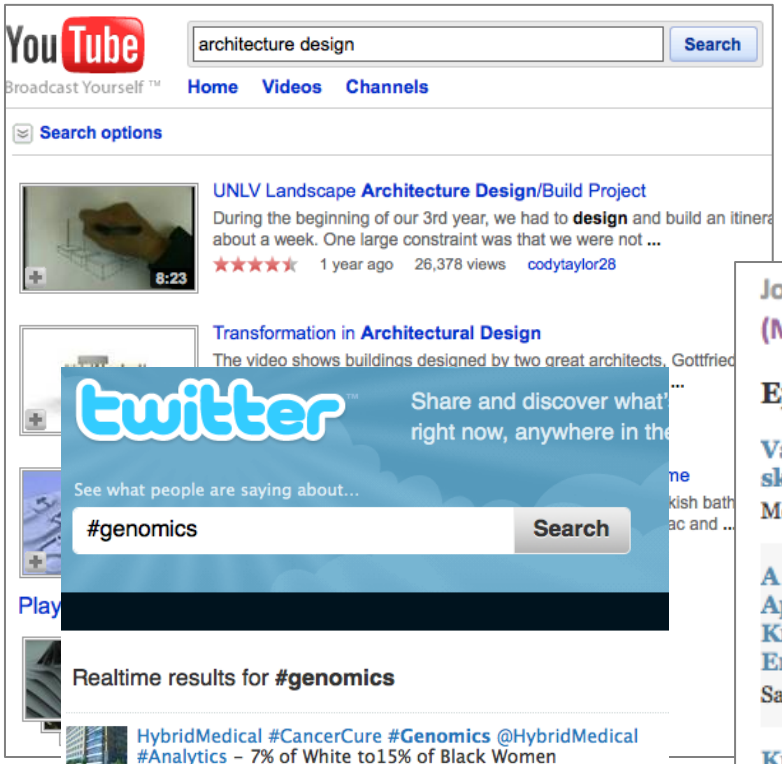
The idea of a web of information was once a technical idea accessible only to highly trained, elite information professionals: IT administrators, librarians, information architects, and the like. Since the widespread adoption of the WWW, it is now common to expect just about anyone to be familiar with the idea of a web of information that is shared around the world. Contributions to this web come from every source, and every topic you can think of is covered.

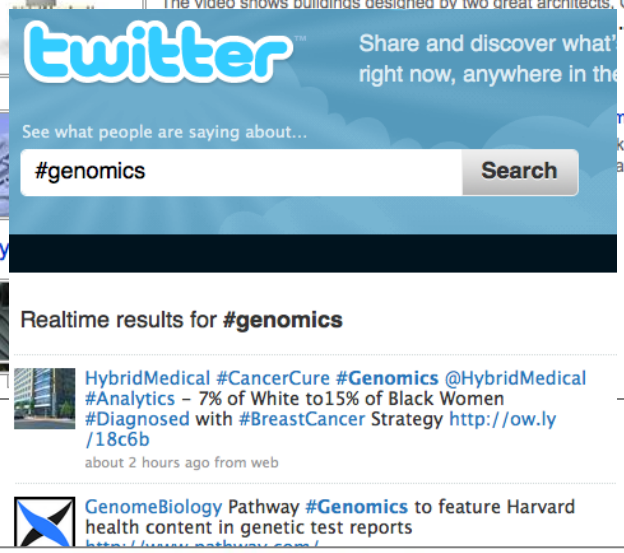
Essential to the notion of the Web is the idea of an open community: Anyone can contribute their ideas to the whole, for anyone to see. It is this openness that has resulted in the astonishing comprehensiveness of topics covered by

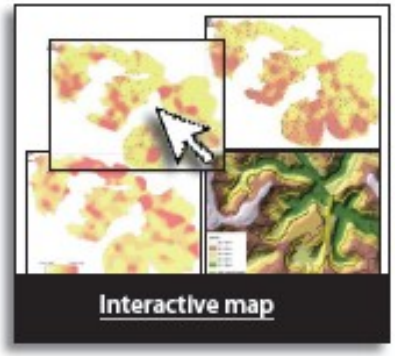
No Preservation Guarantee

No Mashups





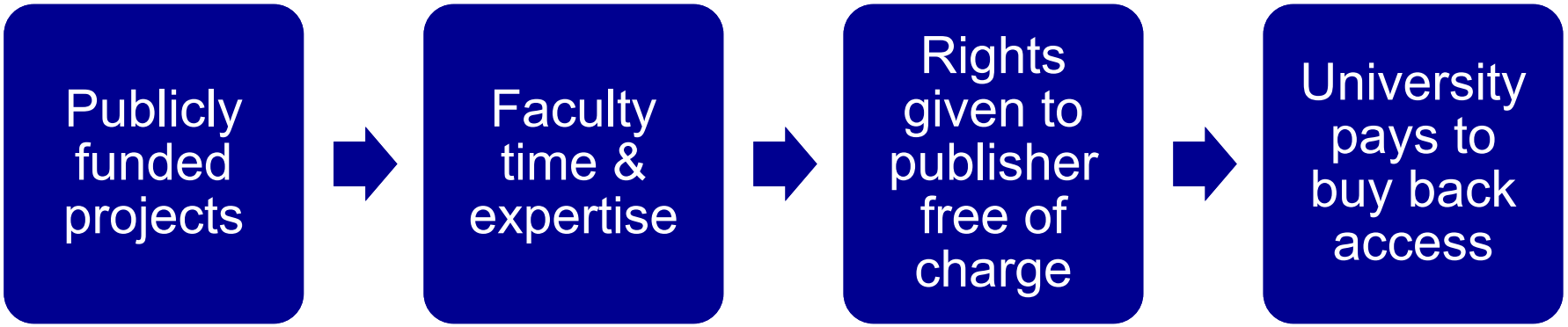




Interactive map:
Originally in a static format, these move-able maps allow the reader to superimpose the data maps over geographical maps on Google, helping the reader to more quickly understand and evaluate the information in the wider context.

YOU may not have access

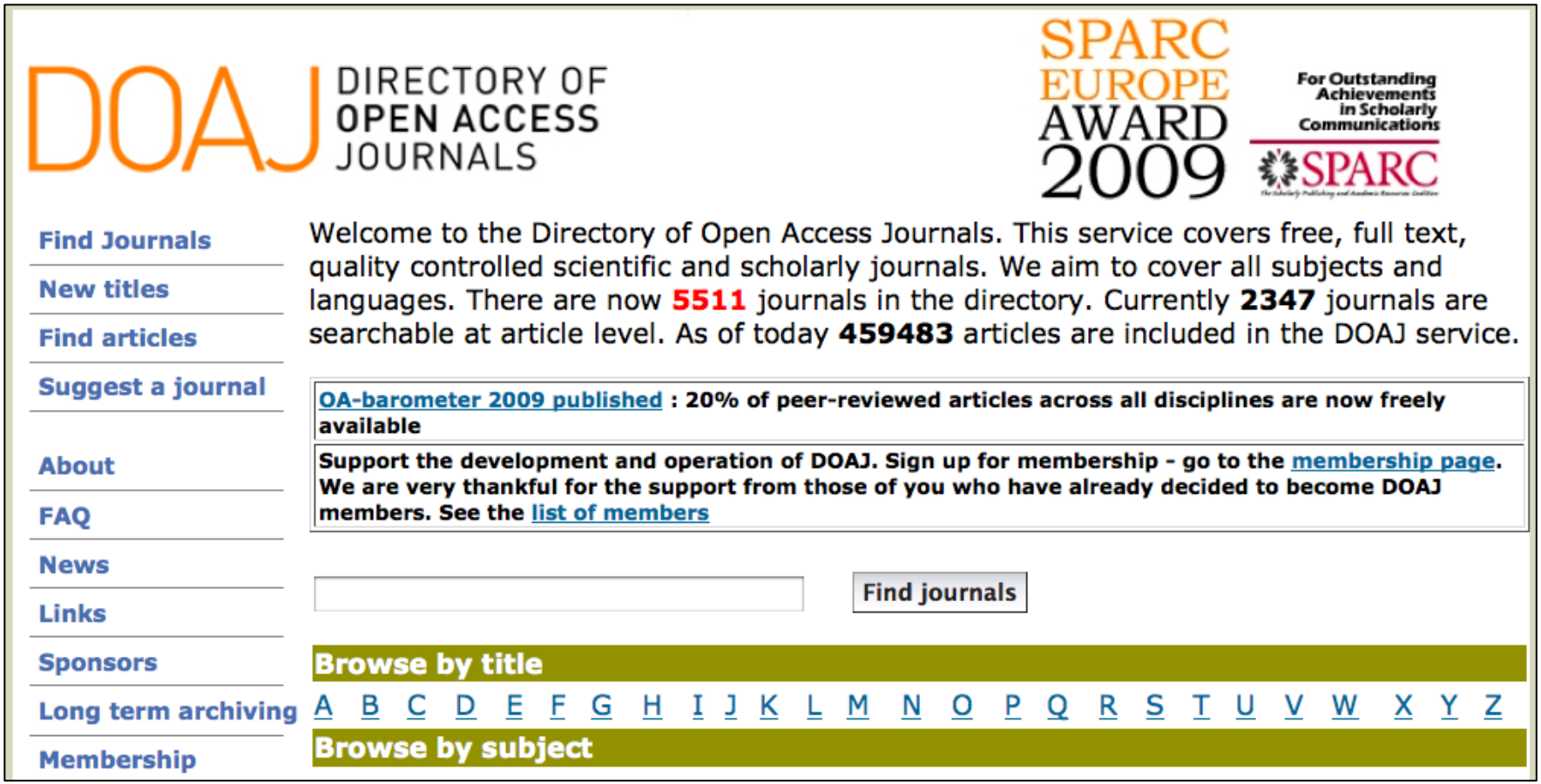
Traditional landscape



Open Access Journals (Gold)

- Peer-reviewed, scientific and scholarly journals
- Author confers non-exclusive publication rights
- Author retains ownership/control
- 100% free full text access

Directory of OA Journals



Institutional Repositories (Green)

- Publish in a non OA journal
- Self-archive in an OA repository
- Preprints, postprints, or both
- Institutional or disciplinary

Directory of OA Repositories

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OpenDOAR

Directory of Open Access Repositories

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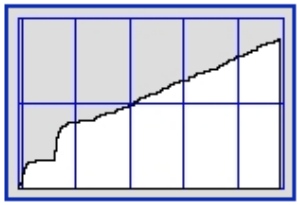
The Directory of Open Access Repositories - *Open*DOAR

Search for repositories | Search repository contents | List of repositories | Repository Statistics

*Open*DOAR is an authoritative directory of academic open access repositories. Each *Open*DOAR repository has been visited by project staff to check the information that is recorded here. This in-depth approach does not rely on automated analysis and gives a quality-controlled list of repositories.

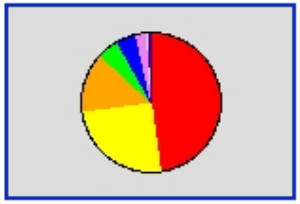
OpenDOAR has over 1700 listings!

As well as providing a simple repository list, *Open*DOAR lets you search for repositories or search repository contents. Additionally, we provide tools and support to both repository administrators and service providers in sharing best practice and improving the quality of the repository infrastructure. Further explanation of these features is given in a project document Beyond the list.



Growth of the *Open*DOAR Database

The current directory lists repositories and allows breakdown and selection by a variety of criteria - see the Find page - which can also be viewed as statistical charts. The underlying database has been designed from the ground up to include in-depth information on each repository that can be used for search, analysis, or underpinning services like text-mining. The *Open*DOAR service is being developed incrementally, developing the current service as new features are introduced. A list of Upgrades and Additions is available.

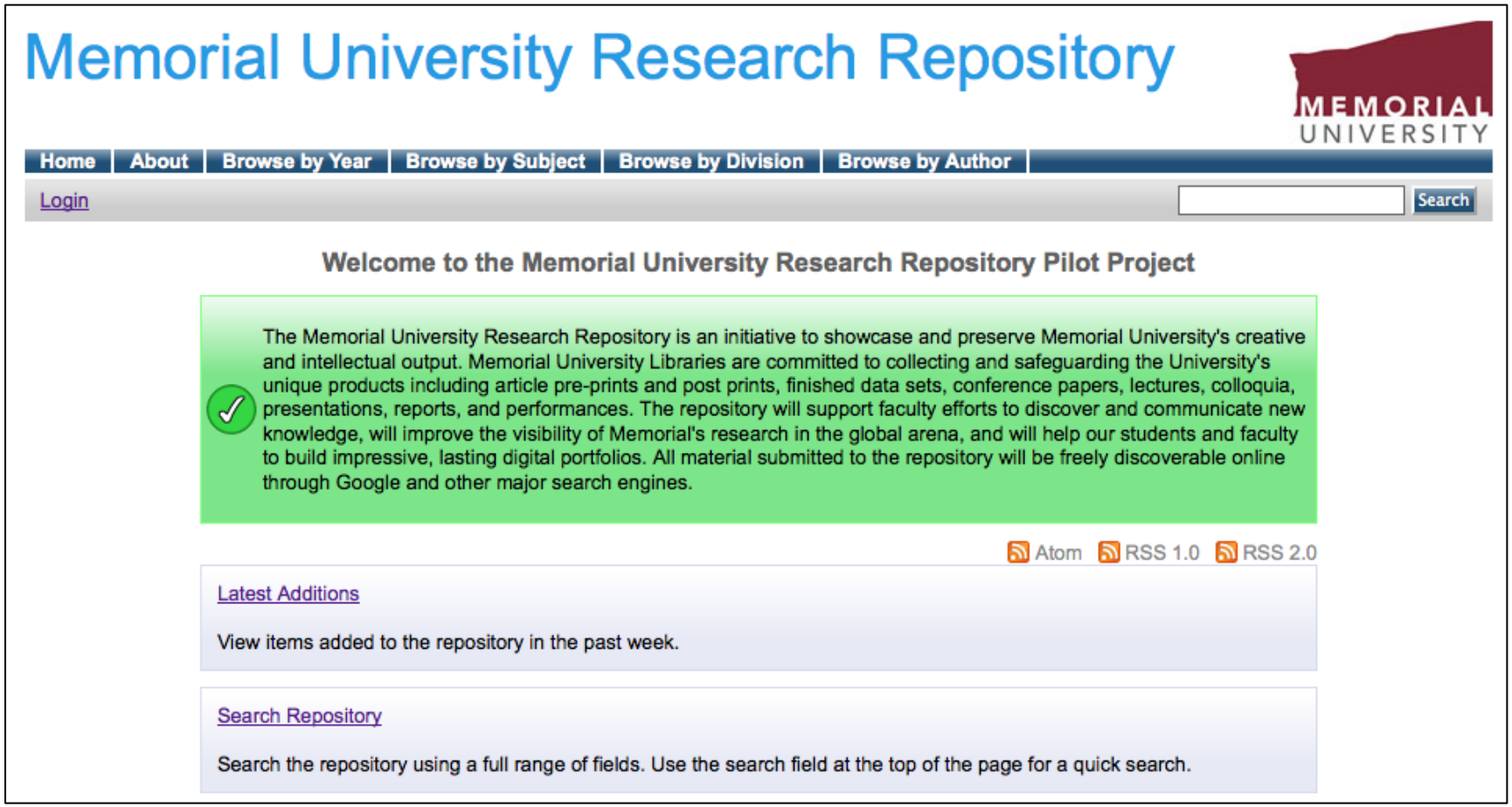


Repositories by Continent

Developments will be of use both to users wishing to find original research papers and for service providers like search engines or alert services which need easy-to-use tools for developing tailored search services to suit specific user communities.

Who Pays?
OA Funding Strategies

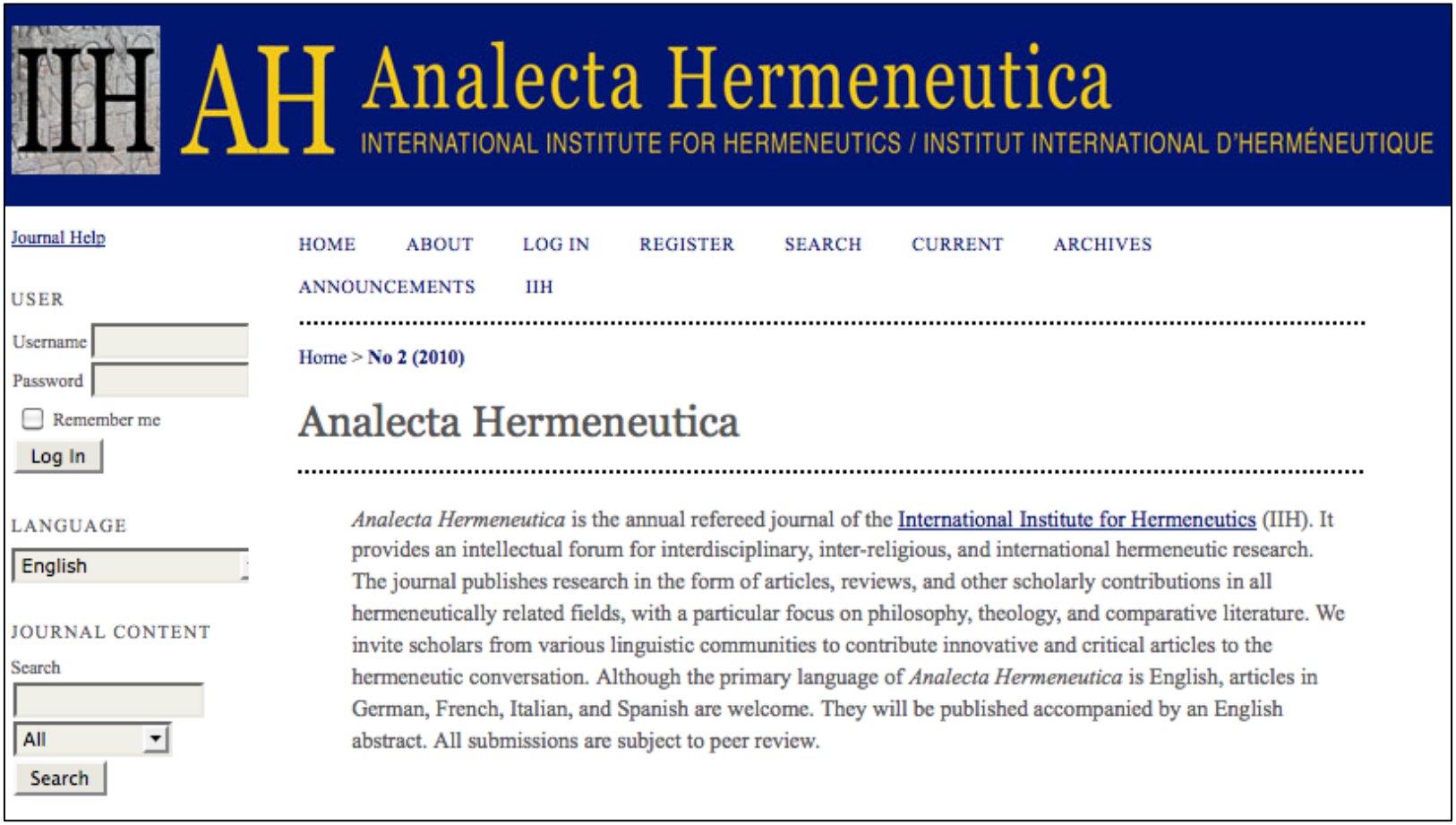
Institutional Repositories



Local Journal Hosting

- Open Journal Systems (OJS)
- open source online publishing platform
- submission management, correspondence, layout, long-term archiving

Open Journal Systems

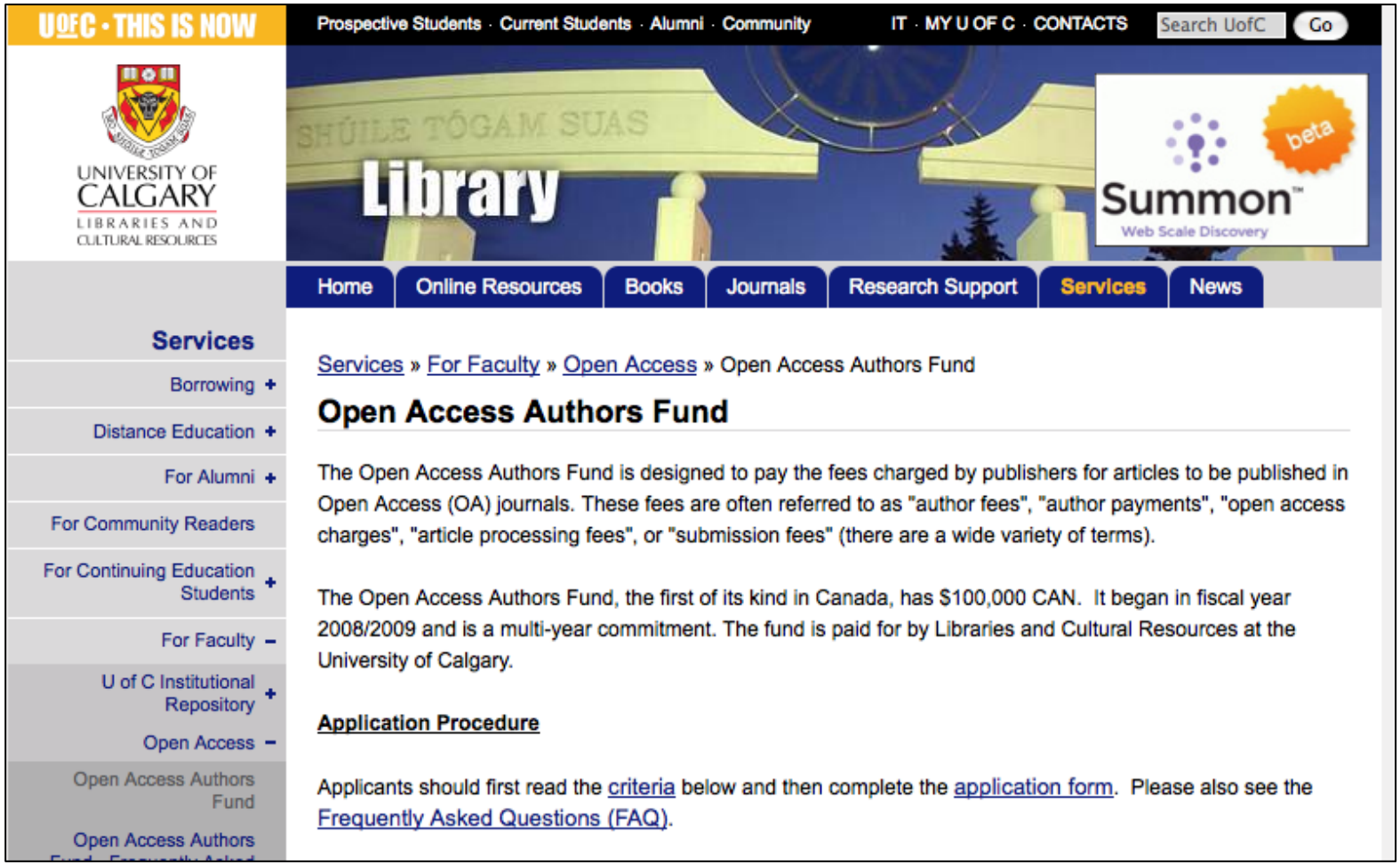


Author Processing Charges

- For profit OA publishers

- Author pays ~$1500 to publish
- Peer-reviewed, scholarly
- Free access

OA Author's Fund



Institutional Memberships

Funding Models

- Many models transfer the costs of scholarly publishing to the university.
- BUT we already pay, so it's just a redirection of funds.

Rights Management Strategies

Lack of Copyright Knowledge

49% of authors have signed publishing agreements without understanding the terms.

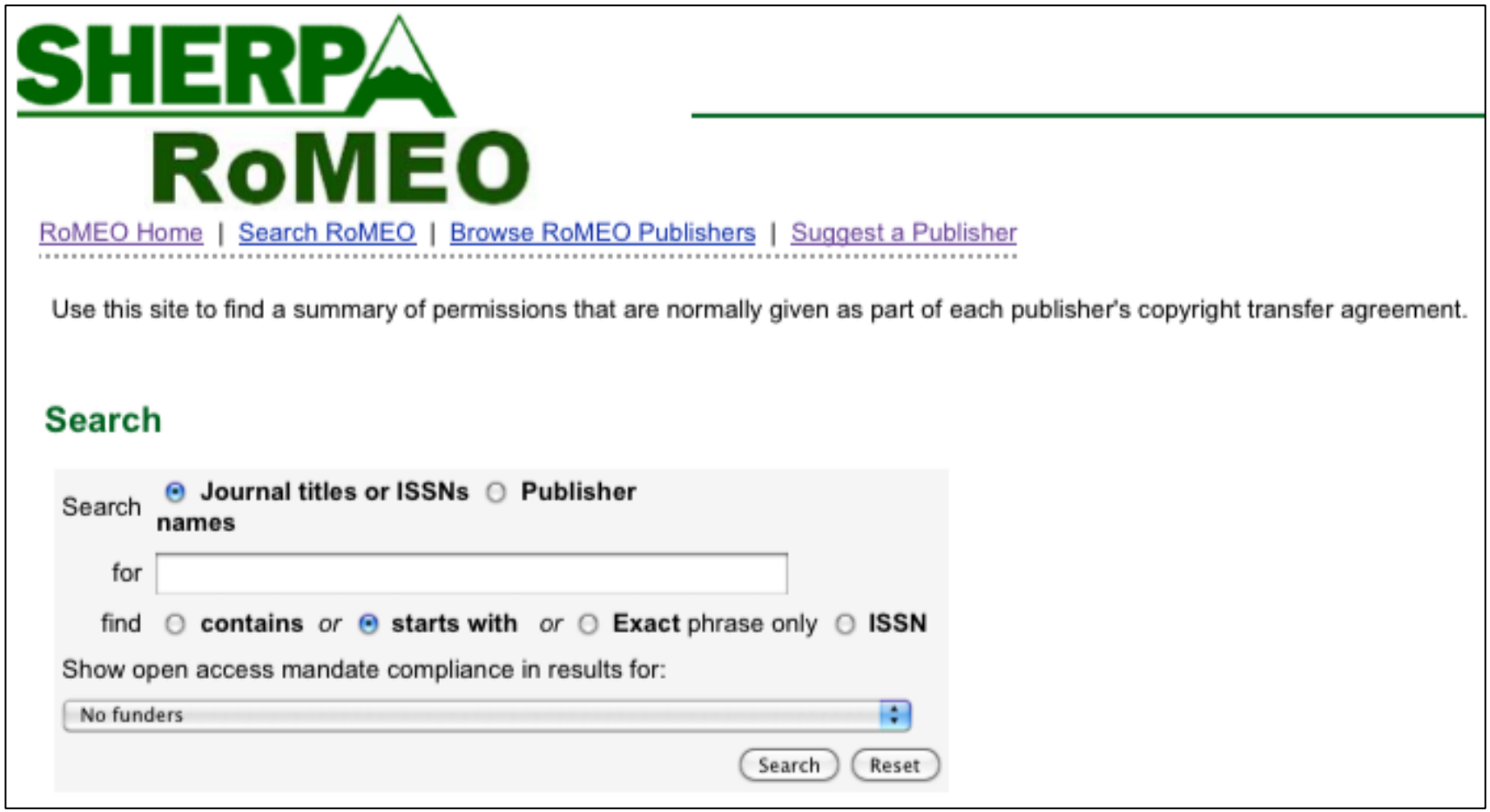
- OAKLaw National Survey of Australian Academic Authors

Unsure of Depositing Rights

Over 50% of authors were unsure if they were allowed to self archive under past and recent publishing agreements.

- **OAKLaw National Survey of Australian Academic Authors**

Finding Publisher Policies



Canadian Author Addendum

- **Publishers require only permission to publish an article, not a wholesale transfer of copyright.**

- **Grant specific rights while holding back rights for yourself and others.**

http://www.carl-abrc.ca/projects/author/EngPubAgree.pdf

Creative Commons Licenses

- legally valid
- no charge
- prevents some uses of a work without permission, authorizes others.

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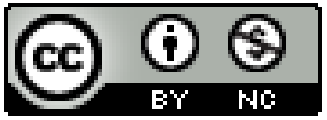
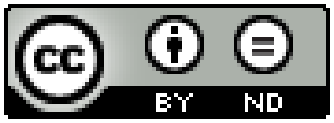
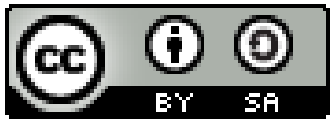


Attribution Non-commercial



Attribution No Derivatives



Attribution Share Alike

Faculty Engagement

Collective Agreement

We will regard a record of open access publication as evidence of service to the community, in evaluation of applications for faculty appointments, promotions and grants.

Institutional OA Policies

- Collective, university-wide action.
- Faculty agreements to retain author rights, and allow open access to intellectual output.

Harvard

BERKMAN CENTER FOR INTERNET & SOCIETY
AT HARVARD UNIVERSITY

Harvard goes Open Access

February 13, 2008

From Berkman Fellow Melanie Dulong de Rosnay...

Yesterday, Harvard University's Faculty of Arts and Sciences (FAS) unanimously voted a motion on open access policy. FAS Faculty members now grant to the university a non-exclusive, irrevocable, worldwide license to distribute their scholarly articles, provided it is for non commercial uses. An opt-out mechanism allow Faculty members to waive this mandatory assignment upon request for some articles, for instance in the case of incompatible rights assignment to a publisher...

This mandated permission to the university contrasts with other approaches to open access, such as:
- self-archiving mandate, or obligation for authors to deposit their articles in open access repositories (research funded by NIH in the US, European Research Council, Wellcome Trust deposit mandate in the UK)
- negotiation by individual authors, without the bargaining power of an institution, to retain some of their rights to reuse and archive pre-print and/or post-print, immediatly or after an embargo period, through copyright addendum to be attached to publisher's copyright agreement, such as those proposed by Science Commons Scholar's Copyright Addendum Engine, developed with SPARC and MIT,
- publication in open access journals, where authors' institutions often have to pay to be published (up to 3000$ per article), instead of the library having to pay a subscription to access to published articles.

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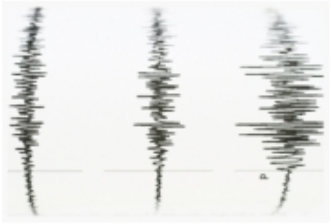
MIT faculty open access to their scholarly articles

today's news

Power from motion and vibrations



Forget about batteries. The ability to harness electricity from tiny vibrations could power a new generation of electronic devices.

March 20, 2009

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CAMBRIDGE, Mass., March 20 - In a move aimed at broadening access to MIT's research and scholarship, faculty at the Massachusetts Institute of Technology have voted to make their scholarly articles available to the public for free and open access on the Web.

The new policy, which was approved unanimously at an MIT faculty meeting on Wednesday, March 18 and took immediate effect, emphasizes MIT's commitment to disseminating the fruits of its research and scholarship as widely as possible.

"The vote is a signal to the world that we speak in a unified voice; that what we value is the free flow of ideas," said Bish Sinyal, chair of the MIT Faculty and the Ford International Professor of Urban Development and Planning.

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Senate Resolution on Open Access

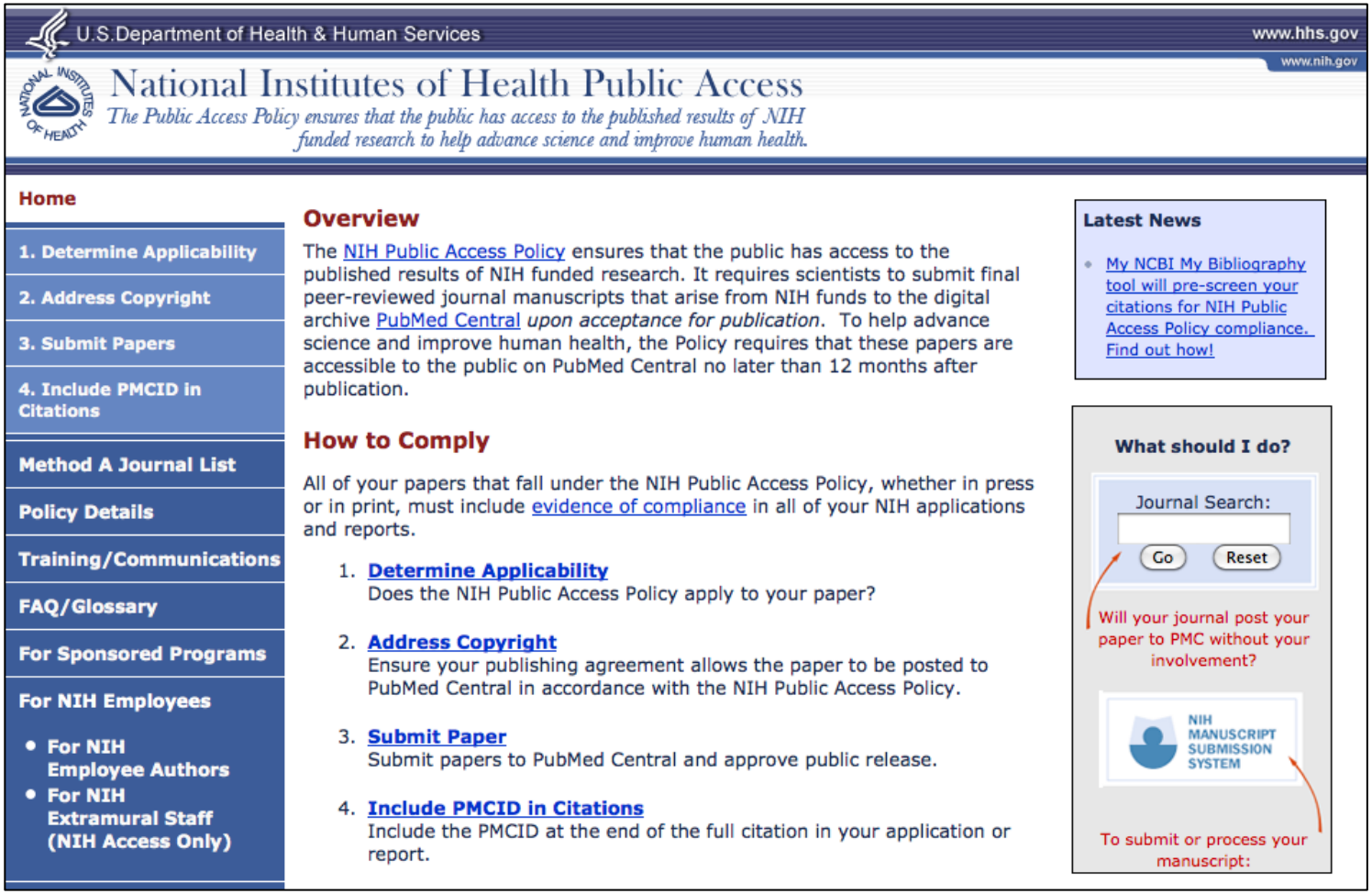
(Approved April 16, 2010)

Whereas

Open access makes the results of publicly funded academic research and creative work accessible to everyone via the internet and succeeds by supplementing but not replacing peer-reviewed journals and other established publishing venues, and

whereas Concordia University wishes to take a leadership role in Canada and exemplify social responsibility by supporting the principles of open access and has recently launched *Spectrum*, an open access repository freely available to receive the refereed academic research output and creative work voluntarily deposited by Concordia faculty

National Institutes of Health



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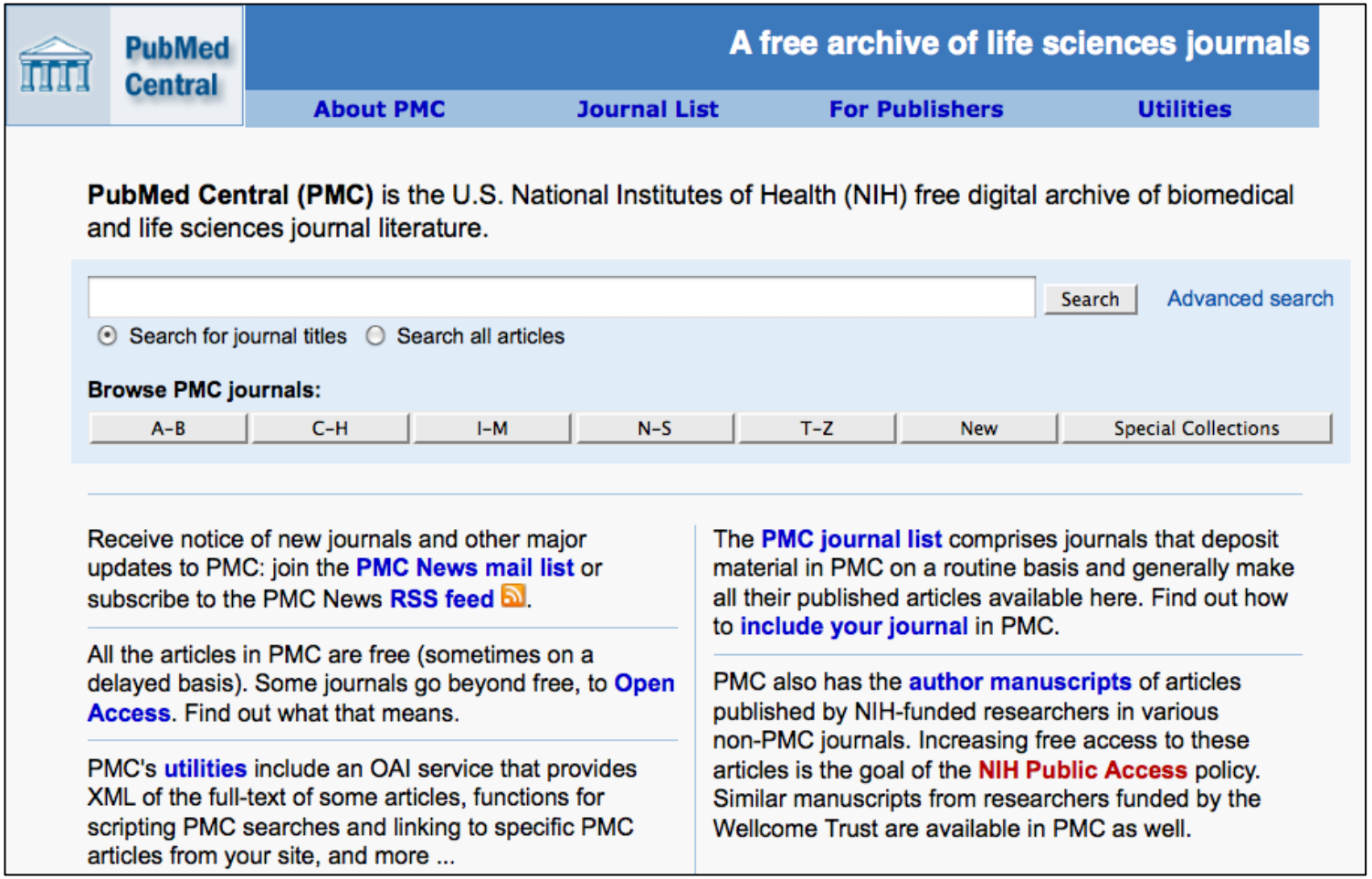
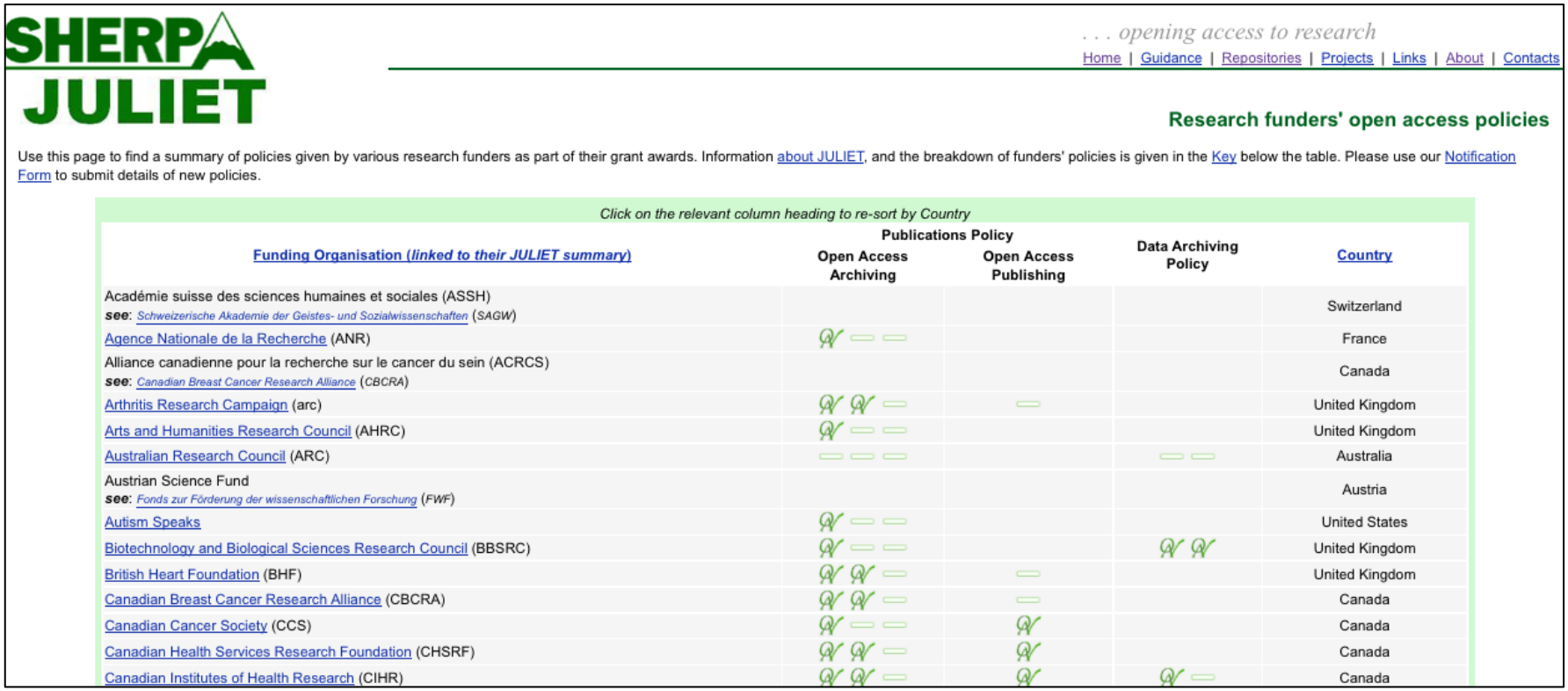


Funding agency requirements



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Research funders' open access policies

Use this page to find a summary of policies given by various research funders as part of their grant awards. Information about JULIET, and the breakdown of funders' policies is given in the Key below the table. Please use our Notification Form to submit details of new policies.

Click on the relevant column heading to re-sort by Country

Funding Organisation (*linked to their JULIET summary*)	Publications Policy: Open Access Archiving	Publications Policy: Open Access Publishing	Data Archiving Policy	Country
Académie suisse des sciences humaines et sociales (ASSH) **see**: *Schweizerische Akademie der Geistes- und Sozialwissenschaften* (*SAGW*)				Switzerland
Agence Nationale de la Recherche (ANR)	✓			France
Alliance canadienne pour la recherche sur le cancer du sein (ACRCS) **see**: *Canadian Breast Cancer Research Alliance* (*CBCRA*)				Canada
Arthritis Research Campaign (arc)	✓ ✓			United Kingdom
Arts and Humanities Research Council (AHRC)	✓			United Kingdom
Australian Research Council (ARC)				Australia
Austrian Science Fund **see**: *Fonds zur Förderung der wissenschaftlichen Forschung* (*FWF*)				Austria
Autism Speaks	✓			United States
Biotechnology and Biological Sciences Research Council (BBSRC)	✓		✓ ✓	United Kingdom
British Heart Foundation (BHF)	✓ ✓			United Kingdom
Canadian Breast Cancer Research Alliance (CBCRA)	✓ ✓			Canada
Canadian Cancer Society (CCS)	✓	✓		Canada
Canadian Health Services Research Foundation (CHSRF)	✓ ✓	✓		Canada
Canadian Institutes of Health Research (CIHR)	✓ ✓	✓	✓	Canada

US Federal Research Public Access Act of 2009

- Federal agencies with extramural research expenditures of over $100,000,000
- Results from research supported, in whole or in part, by gov funding must be made freely available online

OA Success

- **20% of peer-reviewed articles across all disciplines are now freely available**