Introduction to The Lens

An open facility for discovery, analysis, metrics and mapping of scholarly literature and patents

June 2021
The Lens and Cambia

- Cambia, founded in 1991, started Patent Lens in 2001, the precursor of lens.org, the world’s first free and open full text patent search capability.
- In 2006, launched the world’s first public patent sequence search capability for United States patent applications.
- Since 2013, Lens.org has served the world most comprehensive public Patent Sequence platform to navigate biological patents from over 17 jurisdictions.
- In 2011, with seed money from USPTO, Cambia began extracting and resolving non-patent literature strings in collaboration with NIH-NCBI and Crossref.
- By 2014, Cambia linked non-patent literature to patents and began serving the data, created PatCite and In4M metric to map influence of research on industry and foster meaningful partnerships.
- Lens ensure privacy and confidentiality and its data is fully open, shareable and reusable.
- The platform has been up 24/7 for over 20 years.
Lens Scholarly Data

227.7M scholarly works records:

- 115.5M journal articles
- 21.4M Books and book chapters
- 7.3M conference proceedings
- 4.3M works cited in patents
- 76.8M works cited by other scholarly works
- 1.7B scholarly citations
Lens Patent Data

128.7 Million Patent Records:

- 105 jurisdictions
- 70.9M patent families
- 741k biological patents
- 371.1M patent sequences
Our **Special Sauce**
Linkages between data silos

- **128M** Patent Records
- **71M** Patent Families
- **16M** Applicants
- **1.6M** Owners
- **228M** Scholarly Works
- **33M** Authors
- **19k** Research Organizations
- **4.4M** Works cited in patents
- **1.6B** Scholarly citations
- **371M** Bio Sequences
- **2.4B** Document Linkages
THE LENS

Meta Record Strategy

Lens use a “Meta Record” concept as a core element of our facility. We use a 15 digit open and persistent identifier, LensID, to expose credible variants, sources and context of knowledge artifacts, such as scholarly works or patents, while maintaining provenance, and allowing aggregation, normalization, and quality-control of diverse metadata.

https://osf.io/preprints/lissa/t56yh/

Figure 2. The Lens Scholarly Meta-Record (SMR) modeller.
CURRENT OFFERINGS

Discovery, Analytics, And Management Tools

API & Data Facility:
Scholarly API, PatSeq bulk data, Patent API

Collections:
based on Scholarly Works and Patents Lens searches and analyses.

Reports:
Assemble your saved queries and collections with other knowledge in a dynamic and interactive report*

In4M:
International Industry & Innovation Influence Mapping

* coming soon
Unique to open data, Lens Profiles are auto-generated author and inventor profiles based on public ORCID records. Compiled from publicly available data sources using the ORCID iD as the linking identifier. Lens Profiles can be used to update your ORCID record with scholarly works or patents from the Lens in just a few steps.

Research4Life ORCID seminar: https://www.research4life.org/training/webinars/
Create and explore scholarly or patent collections to understand who does what, when and where to inform decision-making. Annotate the data and collate it along with third party data to develop more comprehensive and dynamic reports (coming soon).

Use open dynamic collections to create, curate, annotate and share dynamic portfolios of scholarly works and patents.

Explore these collections to understand who does what, when and where, who influences whom. These open tools inform decision-making for work product management, for partnering, for investing/funding or for research trajectories.

COLLECTIONS

Collections

An efficient method to make human monoclonal antibodies from memory T cells: potent neutralization of SARS coronaviruses

The Genomes Sequence of the SARS associated Coronavirus

The Pathway of the SARS disease process

Coronavirus: Cited Works in the scholarly literature

Collective Descriptions, curated by scholars in scholarly literature

Scholarly Works over time

Coronavirus: Cited Works In The Scholarly Literature

Collections
An open, transparent and granular tool to explore, expose and showcase the degree to which research works, scholars’ work product, or whole institution’s capabilities influence outcomes for society, in myriad forms.
To learn more, watch Richard Jefferson, founder of The Lens, at the Skoll World Forum for Social Entrepreneurship: https://www.youtube.com/watch?v=of8ai1HhqK4

Check out support for tips for using Lens.org: https://support.lens.org/
ACCESS TO LENS.ORG
Patents, Patseq & Scholarly Works

Research4Life is a public-private partnership of five programmes:
Access to Lens databases (current portal)

- Open **Databases for discovery** list from any of the programmes’ content pages.
- Scroll down the list to the links to **Lens.org** options.
Access to Lens databases (new ‘unified’ content portal)

- After logging in, open the **Content list**
- Open **Databases list**
- Scroll down the list to the links to **Lens.org** options
- Lens.org is available to all Research4Life registered institutions
Musings about Librarianship: **Open Access analysis**

[OA week 2020] - Creating a free and beautiful auto-updating dashboard for tracking Open Access rates for your institution using Lens.org

So it is Open Access Week 2020, while I write quite a bit on *Open Access* and *Open Data*, I don't often post specifically for Open Access Week.

One exception was 2017’s *My reflection on my journey in open access* or *Can you be a librarian without being an open access advocate?* where I shared my fears about how the rise of open access might slowly reduce part of the importance or value of academic librarianship (the part that focuses on providing access to resources behind paywalls what Lorcan Dempsey’s calls outside-In) and the difficulties of adjusting to a post OA world and wondering if I should feel guilty about that.

I concluded by saying that

In any case, my thinking currently is open access is inevitable now, so arguing whether you are an advocate or not is pointless. As a librarian we need to prepare now for it’s coming and influence it in a way that leads to the maximum benefits for our users and maybe even with a little bit of consideration for ourselves.

It’s 2020, and my views haven’t changed that much, though I have become more and more aware of the innovation that can be unleashed the more open data (metadata and full text) is available particularly in the research tools space.
University analysis: Makerere University

Research institute analysis: ICDDR’B

Company Analysis: Sasol, South Africa

Patent Portfolio: https://www.lens.org/lens/dashboard/3486

Scholarly research Output: https://www.lens.org/lens/dashboard/3491