

QUT Library advances the use of open public tools to navigate genetic inventions and builds research networks

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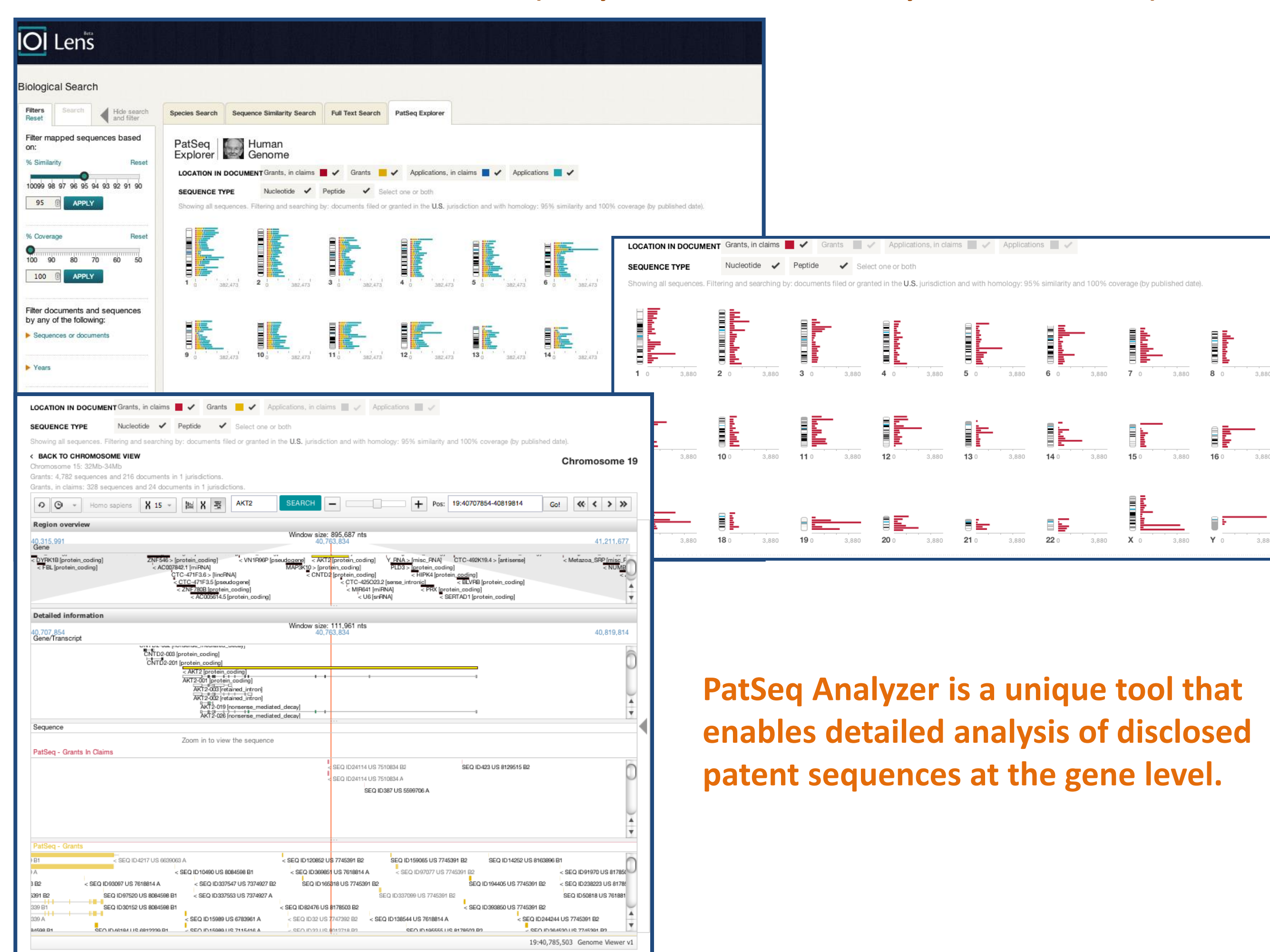
New Biological facility in the Lens

Many emerging economies are dangling the patent system to stimulate bio-technological innovations with the ultimate premise that these will improve their economic and social growth.

The patent system mandates full disclosure of the patented invention in exchange of a temporary exclusive patent right. Recently, however, patent offices have fallen short of complying with such a mandate, especially for genetic inventions. Most patent offices provide only static information about disclosed patent sequences and even some do not keep track of the sequence listing data in their own database.

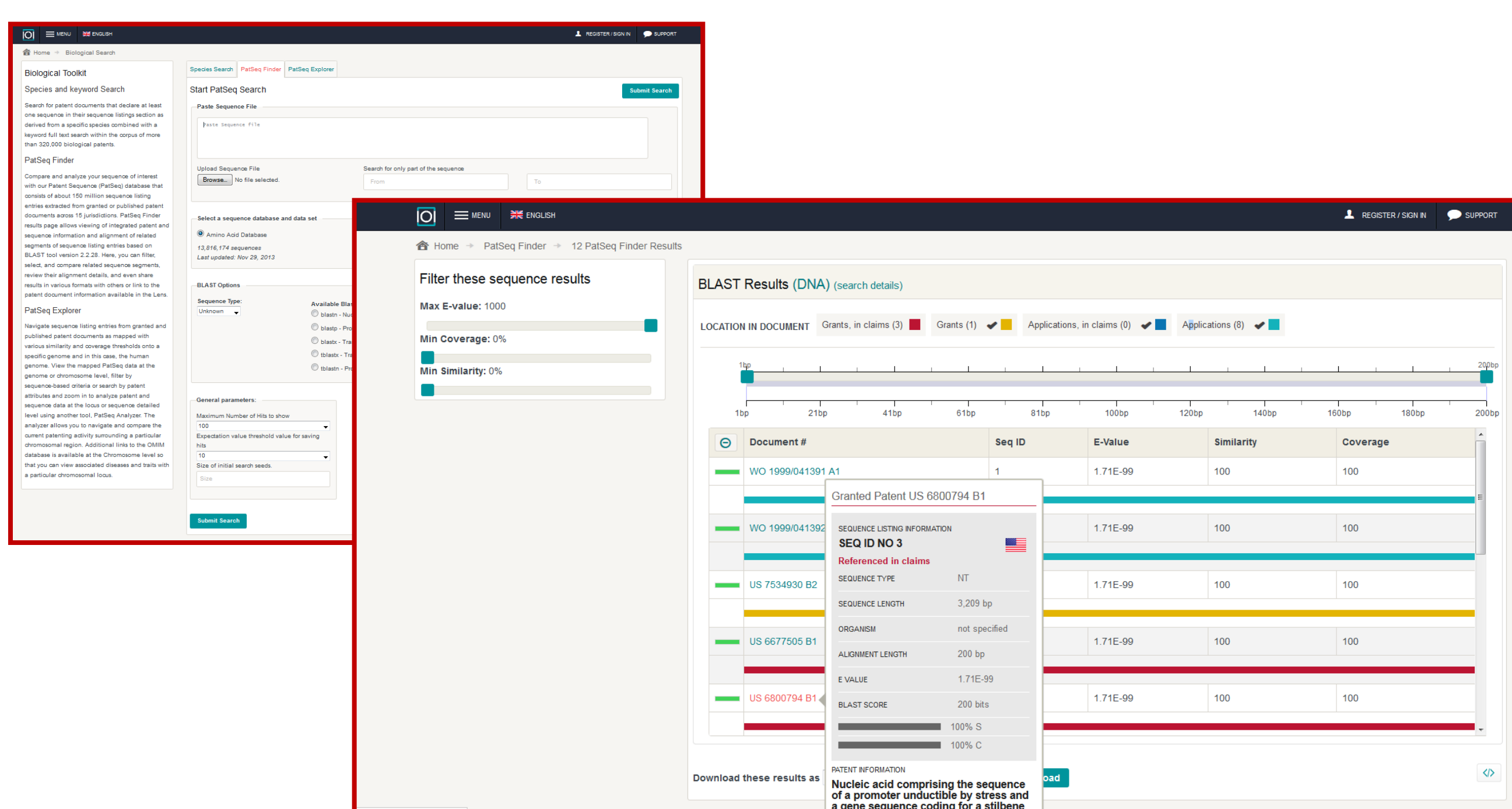
With the currently heated controversy on gene patenting, locally and globally, most scholars, practitioners and policy makers are also operating in an evidence-vacuum space because of the lack of a comprehensive or complete patent sequence datasets.

PatSeq Explorer of the human genome. Many sequences are disclosed and few are referenced in the claim (May not be necessarily even claimed)



Biological sequences disclosed in patents and their corresponding patents need to be readily searchable in order for the skilled person in the art to understand the extent and scope of the invention, differentiate between disclosed and claimed biological sequence, use the invention after patent expires or when abandoned, design around it, and build upon its teachings.

PatSeq Finder is a unique public tool. It allows users to query their favorite sequence against Patseq database and conduct sequence similarity search. Results are displayed in context with their corresponding patent documents.



In Collaboration with QUT, Jefferson et al <http://www.nature.com/nbt/journal/v31/n12/full/nbt.2755.html> developed a web-based platform in the Lens (www.lens.org) to render aggregated sequence and patent data more transparent and created three patent sequence tools; PatSeq Finder, PatSeq Explorer, and PatSeq Analyzer that enable the searching, analyzing, annotating, comparing, and embedding of such data over genomes. The first example targeted the exploration of the scope of “gene patenting” over the human genome.

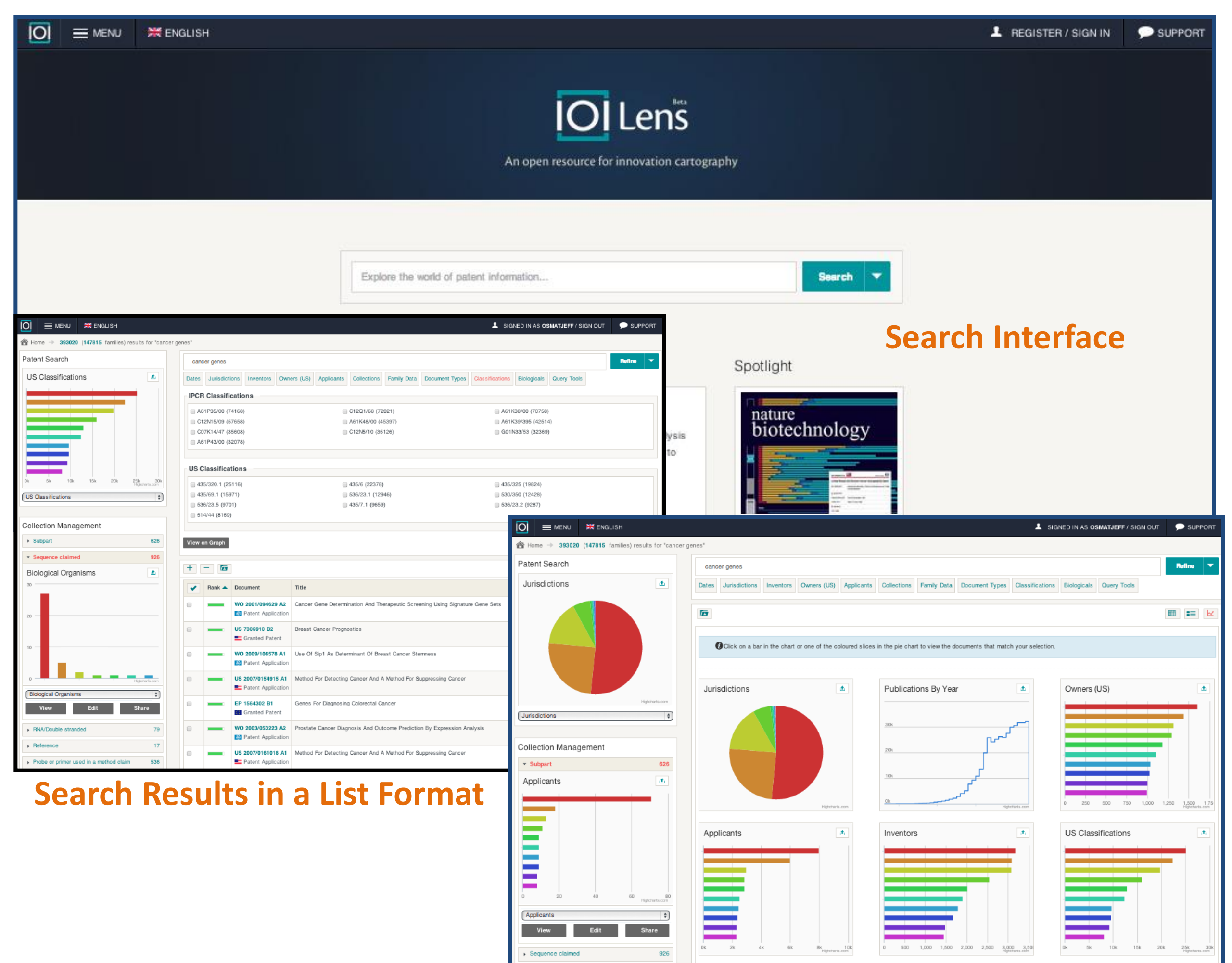
QUT Library Support

Throughout the development of the biological facility and the Lens project, Queensland University of Technology Library provided a blend of core Library research support activities and specialised skills by individual Faculty Liaison Librarians. These include:

- **Promoting the project** to the university and beyond via workshops, presentations, one-on-one consultations and newsletters,
- **Fostering** local skills in analysis of patent information
- **Coaching** skills in developing patent landscape reports
- **Carrying out** environmental scanning of available patent/sequence databases and their content and functionality
- **Performing** intelligence analysis of company information
- **Testing** and feedback of new features

The successful partnership of QUT Library and Cambia exemplifies advocacy in Open Access, Open Innovation and User Participation. The library extends its services to various departments within the university, builds and encourages research networks to complement skills needed to make a contribution in the real world.

The PatSeq toolkit is just one of many features of The Lens project. The global cyber infrastructure hosts and serves nearly 80 million patent documents from 90 jurisdictions as open, annotatable digital public goods that are integrated with scholarly and technical literature along with some regulatory data.



The Lens allows for visualisation and document grouping of the search results by owners, inventors, jurisdictions, and many other patent attributes, most importantly by the existing patent classification schemes - an immediate and practical use that not many for-profit providers could match.

About Cambia

Cambia is a social enterprise, ranked as one of the World's top 100 NGOs in 2012 and 2013, and has been operating internationally for more than 20 years. More information about its history can be found at www.cambia.org. Currently, Cambia collaborates with many national and international agencies in particular with Queensland University of Technology where Cambia's CEO, Richard Jefferson and its Principal Scientist, Osmat Azzam Jefferson, are Professors of Science, Technology & Law.

QUT library and Cambia welcome further engagement to promote the Lens capabilities to researchers, IP professionals, and the interested public.

