

APIs and Datasets Everywhere

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The University of Queensland

- Brisbane, Australia
- Top 100 university
- 35,000 Undergraduate Students
- 13,000 Postgraduate Students
- 4,000 teaching and research staff
- 4,000 FTE other Staff



UQ eSpace

- The single authoritative source for the research outputs of the staff and students of the University of Queensland
- Submission and archival home of UQ Research Higher Degree Theses in digital form



UQ eSpace

- Raises the visibility and accessibility of UQ publications to the wider world
- Provides data for mandatory Government reporting requirements such as the Higher Education Research Data Collection (HERDC) and Excellence in Research for Australia (ERA) as well as for the internal UQ systems such as the Q-Index.
- Operates as an institutional repository for open access publications and other digitised materials created by staff of the University such as print materials, photographs, audio materials, videos, manuscripts and other original works



UQ eSpace

GO

UQ Staff and Students only

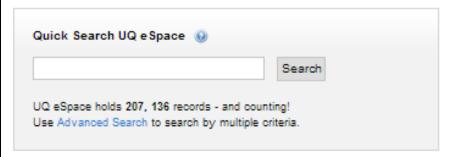
BROWSE

SEARCH

FAQS

ABOUT / CONTACT

Welcome to The University of Queensland's institutional digital repository



Did you know that you can customize your UQ eSpace RSS feeds by multiple search criteria?

What is RSS?

Our open repository content is indexed by:







Daily Snapshot

Recently Added

- Recently Popular
- Tags
- News
- Hart, H. F., Collins, N. J., Ackland, D. C., Cowan, S. M. and Crossley, K. M. (2014). Immediate Effects of Varus Bracing On Knee Mechanics in People with Predominant Lateral Knee Osteoarthritis and Valgus Malalignment, 12 Years After Anterior Cruciate Ligament Reconstruction. In: , Osteoarthritis and Cartilage. World Congress of the Osteoarthritis-Research-Society-International (OARSI), Paris France, (S34-S34). Apr 24-27, 2014.
- Jacobs, Jason (2013) Italian TV Drama and Beyond: Stories from the Soil, Stories from the Sea. Media International Australia, 148: 158-159.
- Ghaffar, Khairunnisa Abdul, Giddam, Ashwini Kumar, Zaman, Mehfuz, Skwarczynski, Mariusz and Toth, Istvan (2014) Liposomes as Nanovaccine Delivery Systems, Current Topics in Medicinal Chemistry, 14 9: 1194-1208.
- Macri, E. M., Culvenor, A. G., Russell, T., Khan, K. M., Whitehead, T. S., Morris, H. G. and Crossley, K. M. (2014). Is Patellofemoral Alignment and Morphology Related to Patellofemoral Osteoarthritis as Early as One Year After Anterior Cruciate Ligament Reconstruction?, In:, Osteoarthritis and Cartilage, World Congress of the Osteoarthritis-Research-Society-International (OARSI), Paris France, (S253-S253), Apr 24-27, 2014.
- Martin, Richard J. (2014) National Days and the Politics of Indigenous and Local Identities in Australia and New Zealand.. American Ethnologist, 41 2: 390-391.

RSS I More ...



eSpace

- Evolved from open repository.
- Tool for publication analysis and collation
- Currently push back to open repository



eSpace

- Fedora backend
- Open source code base Fez adapted from Eventum
- 10 year+ code base
- Available Github
- Php / MySql
- Solr
- Plan on removing Fedora



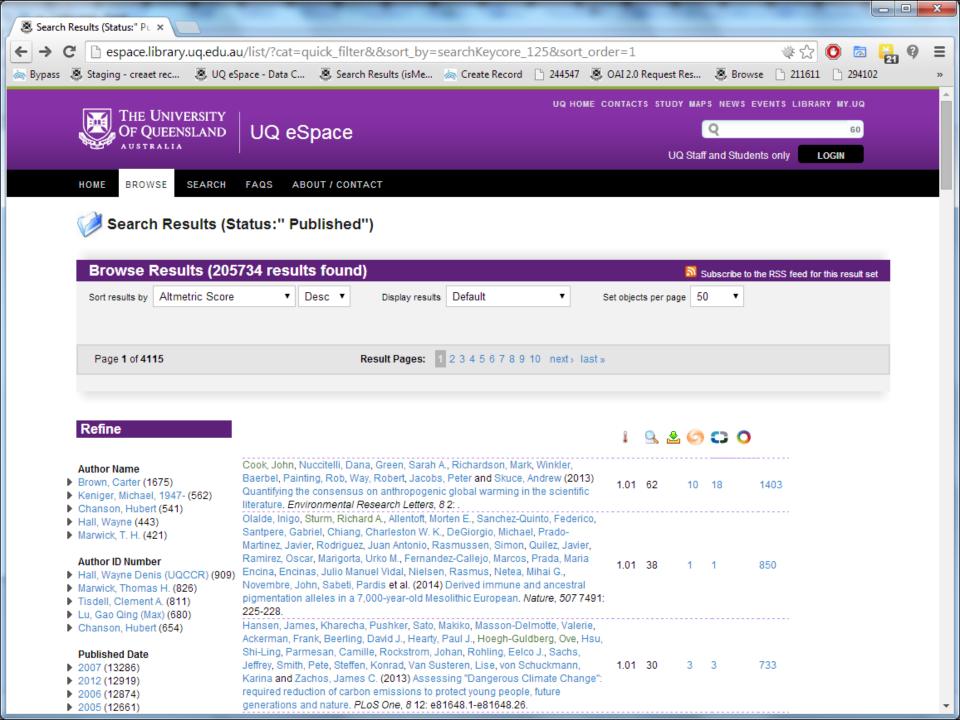
APIs - In

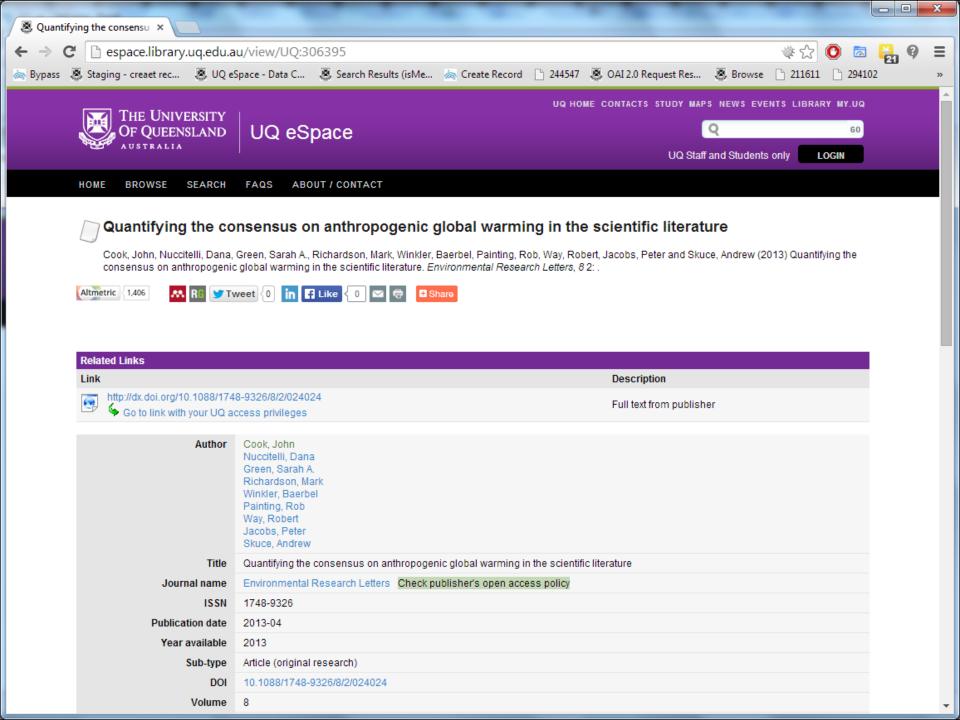
- Links AMR
- Scopus
- Web Of Science
- SHERPA/RoMEO
- ResearcherID
- Ulrichs

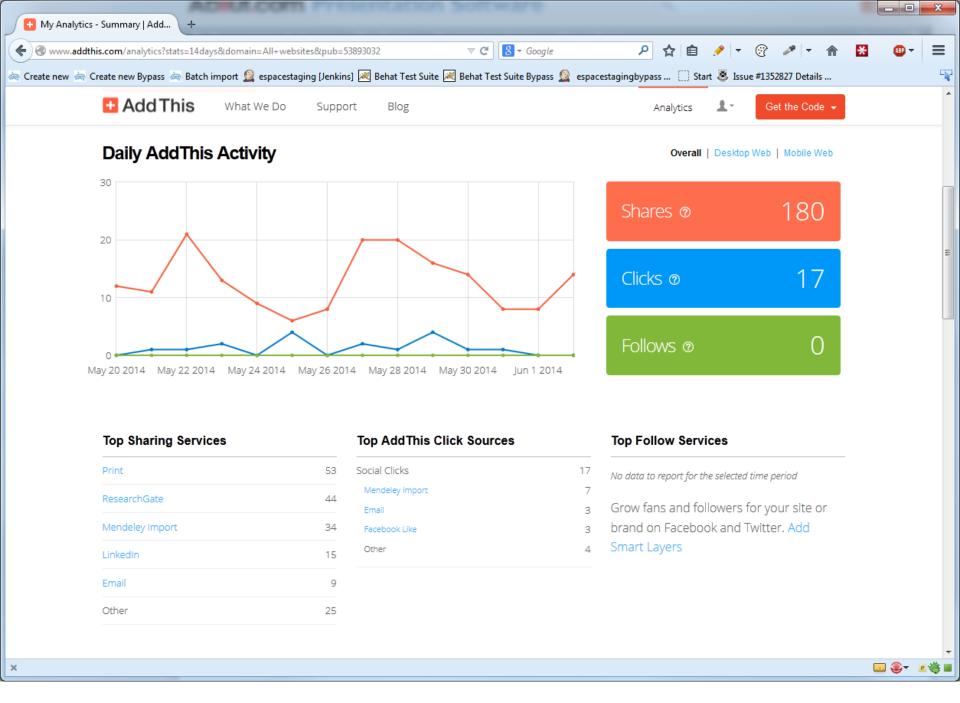


APIs - Out

- CrossRef Creating DOI's
- XML feeds
 - Trove Content
 - ANDS Data collections
 - Summons Catalogue
- AddThis
- Altmetric
- Google sitemap

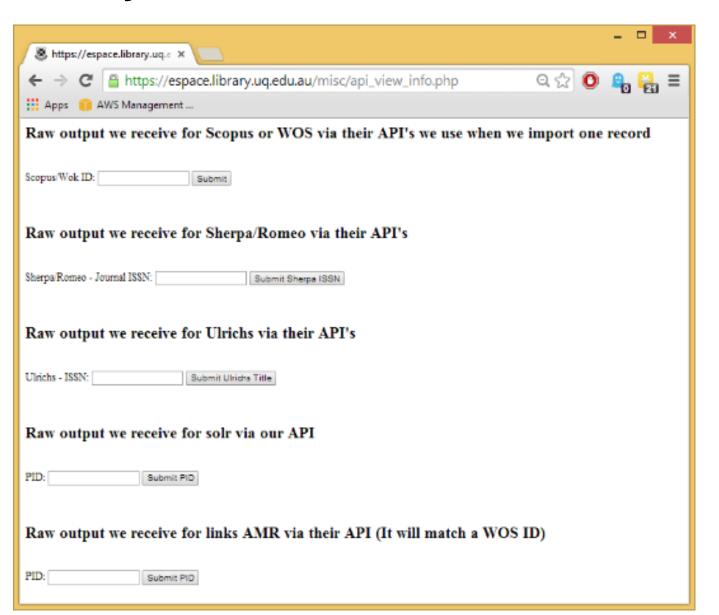


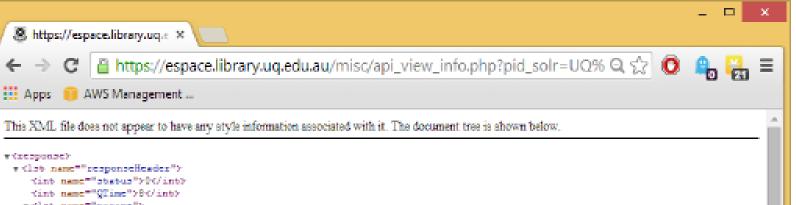






Handy features





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        href="/list/author/Crossley$2C+E.+M./">Crossley, E. M.</a> (Appen class="citation date">2014</appn>). <a href="/list/author/Crossley$2C+E.+M./">Crossley, E. M.</a> (Appen class="citation date">2014</a>
        class"citation title" title "Click to view Conference Paper: Immediate Effects of Varus Bracing On Knee Mechanics in
        People with Fredominant Lateral Ence Optoparthritis and Valgus Malalignment, 12 Years After Anterior Cruciate Ligament
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        Laberal Knee Osteoarthritis and Valgus Malalignment, 12 Years After Anterior Cruciate Ligament Reconstruction(/a). In: ,
        Copen class="citation proceedings title">Coteoarthritis and Cartilage(/open). <i>Copen
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The Future

- One full time developer
- Risk of employee leaving
- Moving to other software. On going costs. The need for management.



Visualising University of Queensland Institutional Data

What?

- Authors application
- Organisations application
- Future UQ wide application

How?

- Service Oriented Architecture
- Amazon infrastructure
- Laravel PHP backend
- AngularJS + others/Bootstrap Frontend
- Jenkins/Karma/PHPUnit
- Datasets and APIs...



The Elsevier Scopus Custom Dataset and InCites Dataset

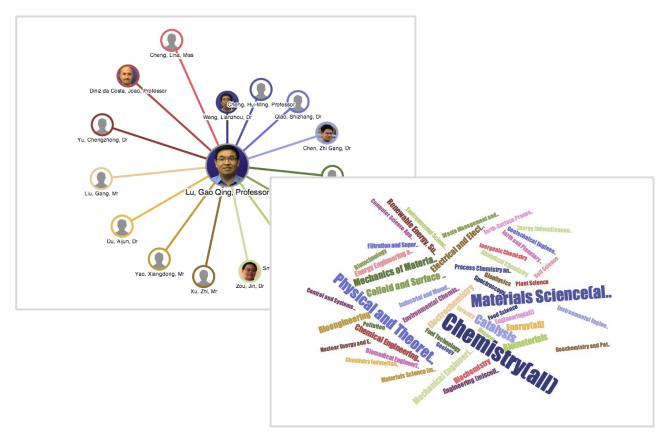
- Scopus Custom Dataset
 - ~19 million XML documents and counting
 - Dataset purchased for pulling specific statistics
 - Biannual updates
- InCites Dataset
 - Pipe delimited text files
 - Link to download data periodically

Allowed to utilise derived statistics so long as references provided

What else could we do with the data when married with the data already in our institutional repository?



Internal Staff Collaboration and Areas of Research



D3.js/AngularJS



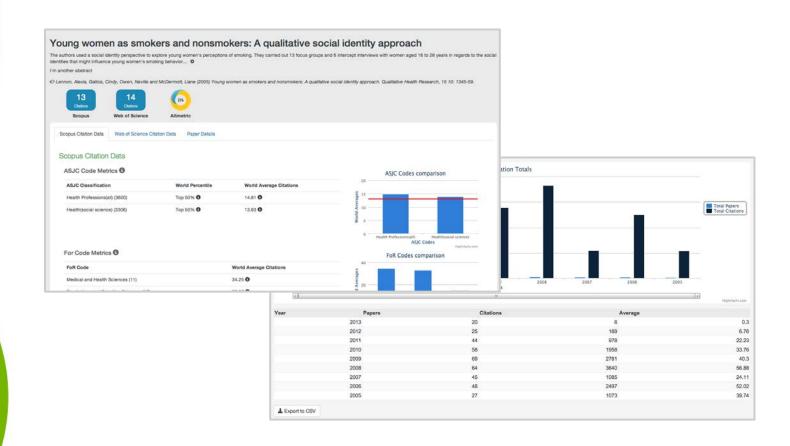
Country and Institutional Collaboration



Google Charts/Maps/GeoCoding APIs



Paper Metrics and Citation History



Highstock, Altmetric

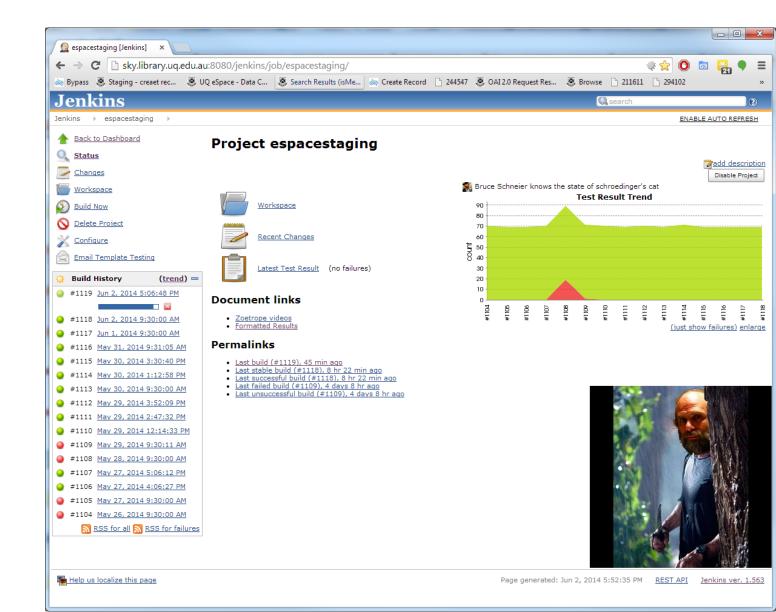


Challenges of integrating external datasets

- Data not provided in a database ready format
- Data limited to certain years
- Data provided periodically
- Data is often dirty, authors and institutions identifiers sketchy
- Asking the right questions
- Collaboration with other areas of the university



Jenkins





Lessons learned

- APIs often fail
- Easy debugging and access
- Undocumented and lost issues



Thanks for listening!

For further details:

Come up and talk to us throughout the conference or...

We'll be doing a poster presentation and demonstration @ 6:30pm-8:30pm · Location: Kaisa House

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