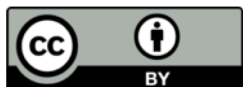


Apollo, Cambridge's Institutional Repository, and the University's CRIS system

[10.17863/CAM.24236](https://doi.org/10.17863/CAM.24236)

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DuraSpace-euroCRIS Interoperability Event
Umeå, Sweden, June 13, 2018

Outline

- Overview of systems at Cambridge
- Repository and CRIS integrations
 - Before & after
 - Integration points
- Benefits & challenges
- Next steps

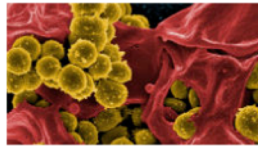
Background: Apollo

Apollo - University of Cambridge Repository

This repository holds the research output of members of the University of Cambridge. It is delivered and managed by the University Library's [Office of Scholarly Communication](#) team.



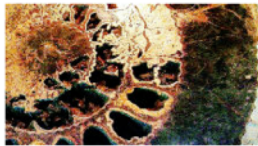
School of Arts and Humanities



School of Clinical Medicine



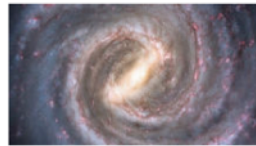
School of Technology



School of the Biological Sciences



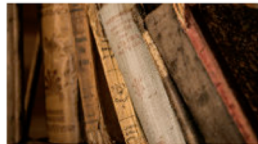
School of the Humanities and Social Sciences



School of the Physical Sciences



Colleges



Other Communities

Share your
research

- Apollo holds the University's research outputs
- Available since 2003
- Runs on the DSpace repository platform (open source)

<https://www.repository.cam.ac.uk>

Background: Apollo use



Apollo



- One of largest DSpace repositories in the world (over 230,000 items)
- Since May 2016 ...
 - 17,000 DOIs minted
 - > 2.5 million downloads of repository content
 - > 28,000 full-text files available open access

***Source:** Institutional Repositories Usage Statistics UK (IRUS UK)

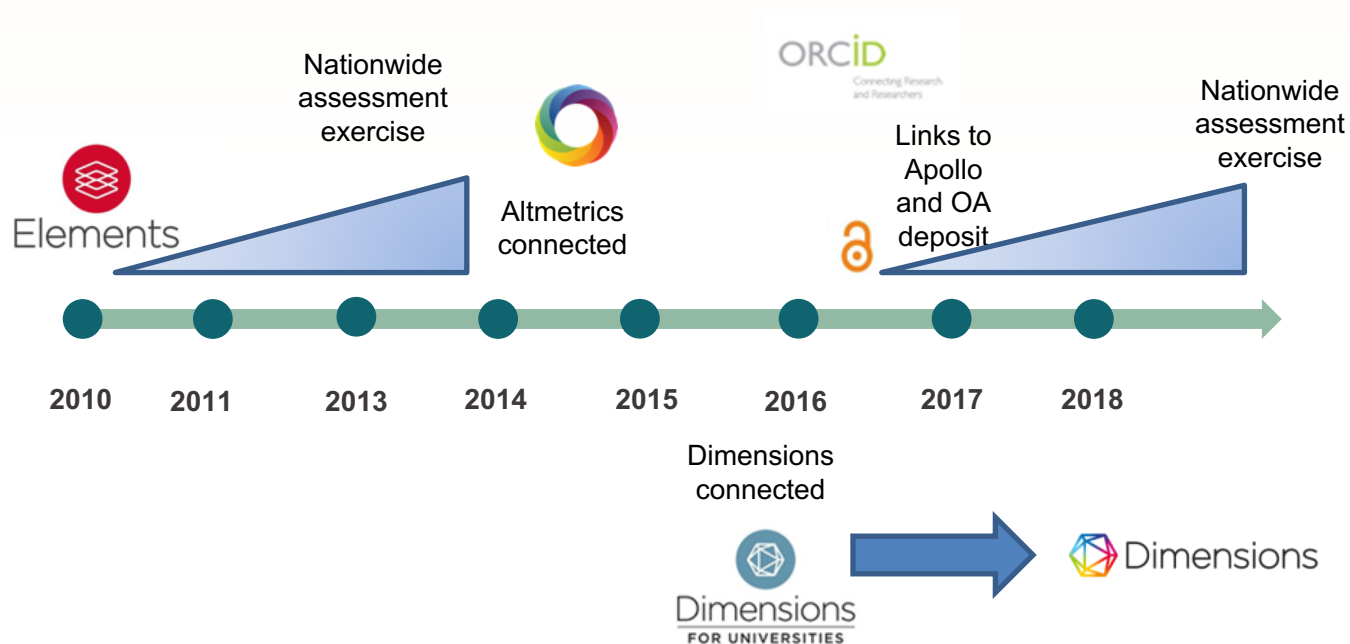
Background: Symplectic Elements

The screenshot displays the Elements v5.10 interface for a journal article. The article title is "Circulating concentrations of vitamin D in relation to pancreatic cancer risk in European populations." The authors listed are van Duijnhoven FJB, Jenab M, Hveem K, Siersema PD, Fedirko V, Duell EJ, Kampman E, Halfweg A, van Kranen HJ, and van den Ouweland JMW. The article is from the International Journal of Cancer, volume 142(6), pages 1189-1201, dated 15 Mar 2018. The interface includes sections for "Journal article", "Citation Metrics" (Altmetrics, RCR, Dimensions, EPMC, Scopus, WoS), "Journal Rankings" (SNIP, SJR), "Full text" (with a "View deposit" button), "Data sources" (Dimensions for Universities, Europe PubMed Central), "Actions" (Mark as Favourite, Add to Workspace), "Reporting Date" (15 Mar 2018), and "History" (showing 1-4 of 7 actions).

- Elements (v5.10)
- Internal system in use since 2010
- Linked data
 - ~ 6K active users
 - ~250K publications
 - ~14K grants
 - ~14K professional activities

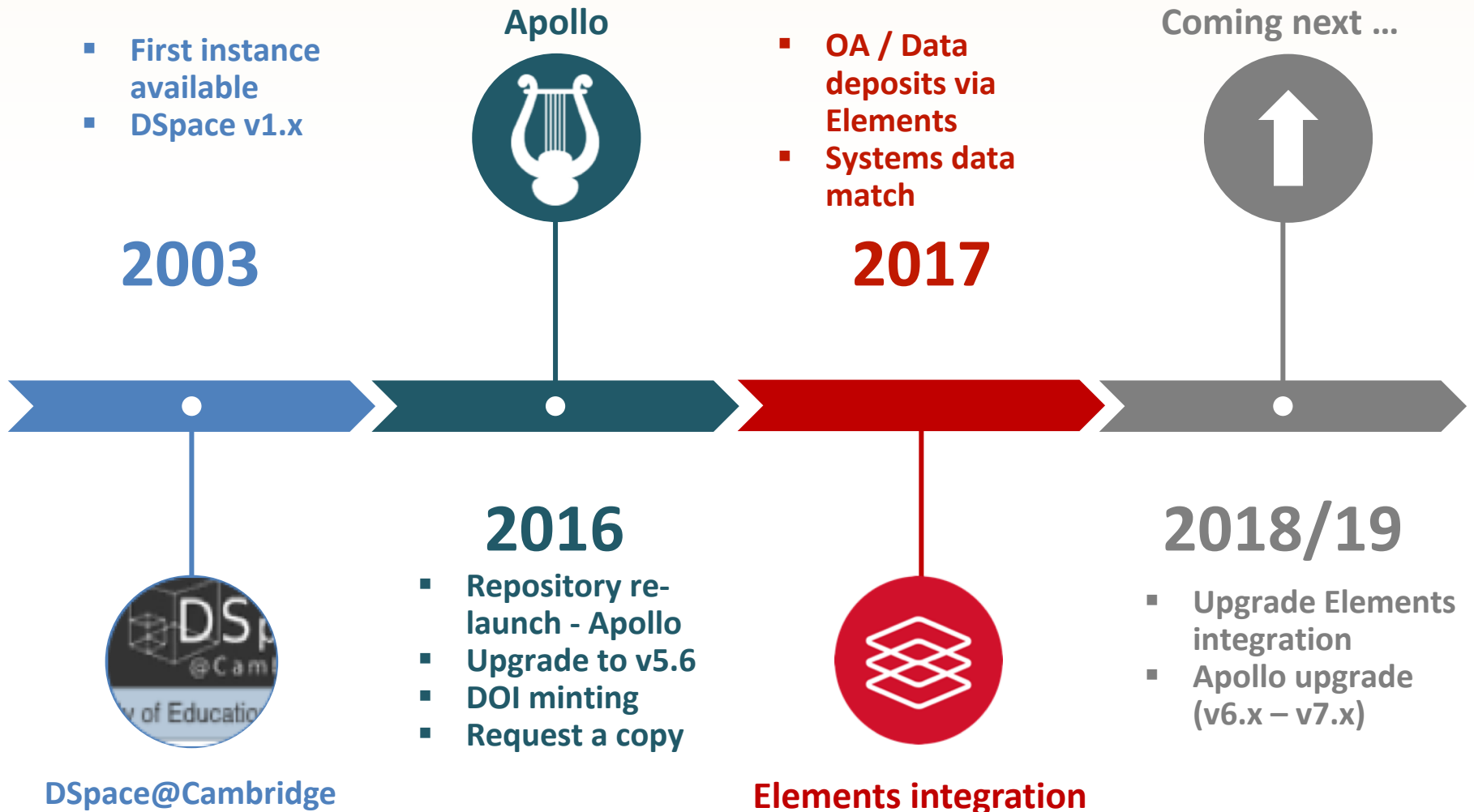
<https://elements.admin.cam.ac.uk>

Background: Symplectic Elements (II)

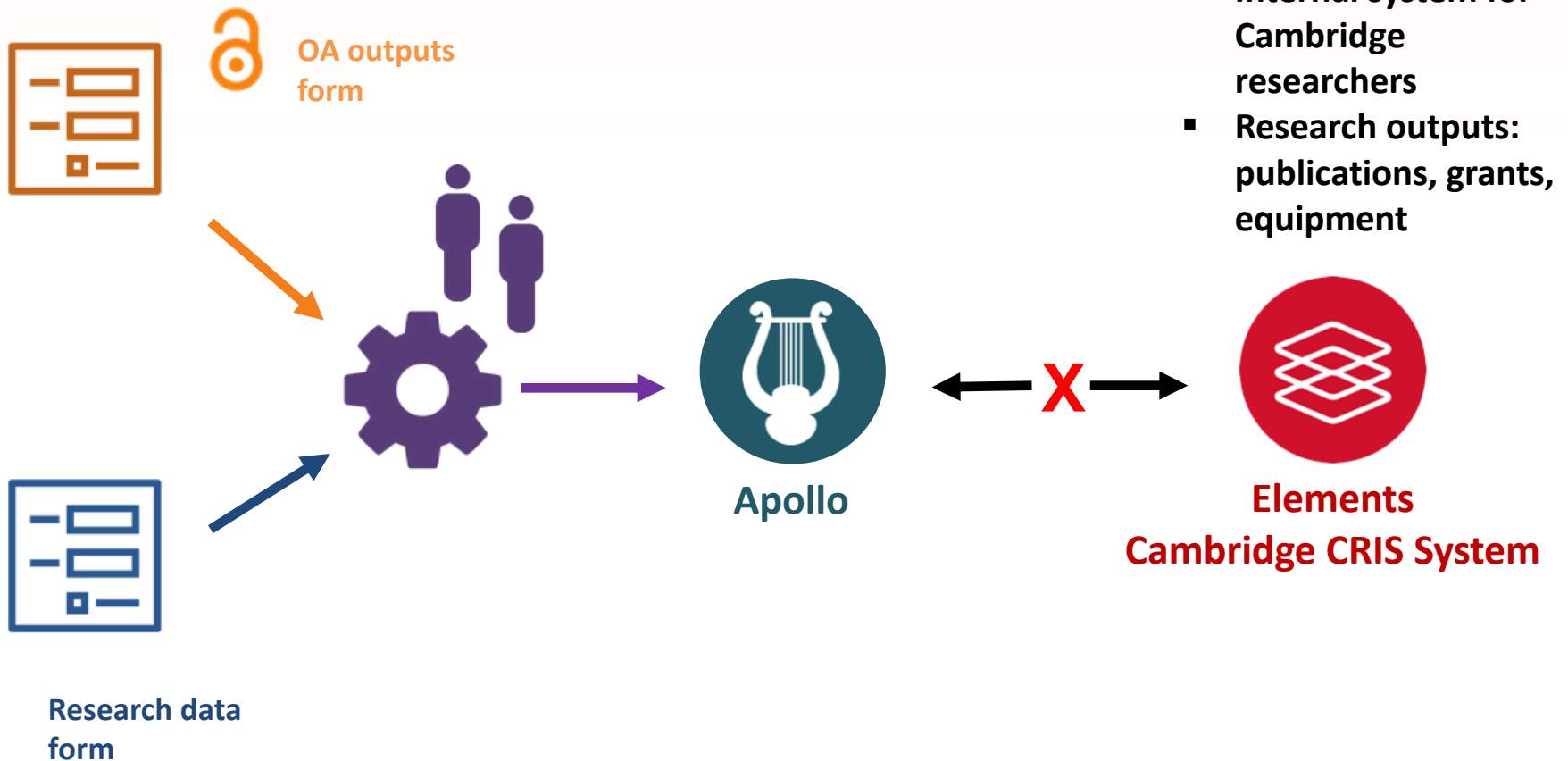


Timeline of research information at Cambridge

Repository integrations project

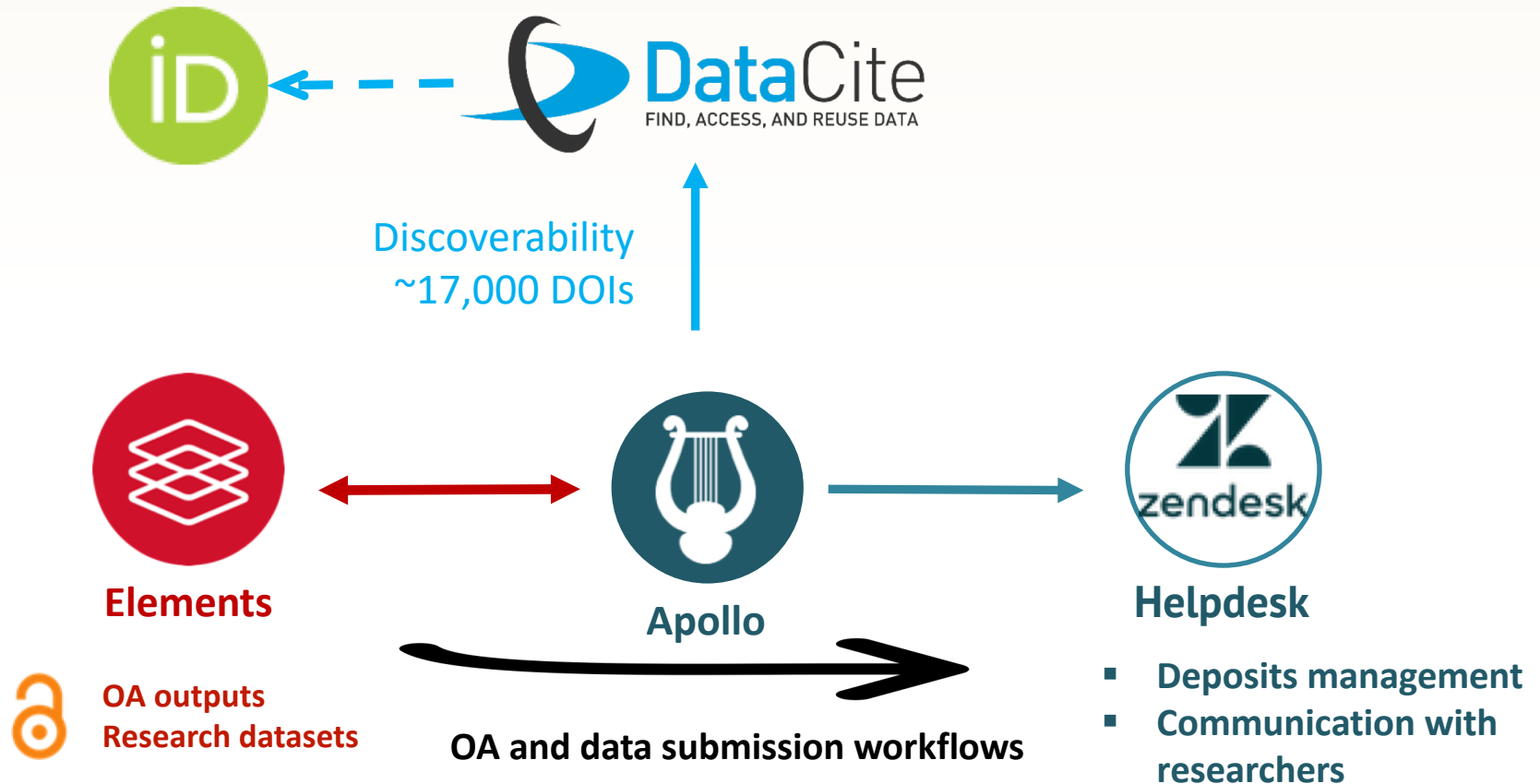


Before integration



Prior to repository upgrade: disconnected systems

After integration



Following from upgrade ...

Integration points (and workflows)



Elements



Open Access (OA)

Article and data deposits
via CRIS



Apollo



Helpdesk

OA workflows

- Submission management
- Communication with researchers

Repository ↔ Elements

- Via Repository Tools 1 (RT1) connector
- Repository – CRIS metadata crosswalks
- Data match to link existing repository content in CRIS
- Automatic update of repository records

Repository → Helpdesk

- Via Zendesk API
- Tickets creation and update
- Receive updates from Elements

Benefits after integration

For researchers

- **'One stop' shop:** OA deposits, grants linking and researcher profiles
- Flexible submission workflows: **placeholder DOIs** for in-progress research datasets can be issued

Open Access policies and funder compliance

- Enhanced reporting
- Data available from a single source

Enhanced visibility of outputs

- DOI registration and richer publications metadata
- Populated ORCID profiles

Remaining challenges

Technological

- Systems dependencies: cannot upgrade DSpace beyond **v5.x** due to incompatibility with the RT1 connector
- Duplicate records in Elements due to multiple submissions: i.e. accepted and published versions of articles
- Metadata updates: “all or nothing”

Data related

- OA compliance reporting is very complex and relies on the availability of complete publications data
- Varied coverage from external metadata sources

Operational

- Large volume of deposits (it is a good thing!) but review processes in the repository are cumbersome and time-consuming
- Very complex user interface for researchers in CRIS system

Next steps: migrate to RT2

- Upgrade current repository – CRIS connector to Repository Tools 2 (**RT2**)
 - Repository – CRIS integration decoupled from repository
 - Enhanced and highly configurable metadata crosswalks
- Current blockers preventing migration now
 - Lack of subsequent deposits into the repository
 - Metadata updates from CRIS to repository not available yet

Next steps: Fast-track deposits

Publication summary

Title [Learned hook avoidance of lemon sharks \(*Negaprion brevirostris*\) based on electroreception and shock treatment](#)

Publisher DOI [10.1080/17451000903039749](#) **Elements ID** [860002](#)

Required Information

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Submitted version	Version before peer-review changes and formal acceptance by editor
Proof version	Version after copy-editing/typesetting by publisher but before publication
Other	Unidentified or problematic version – forward to Open Access team

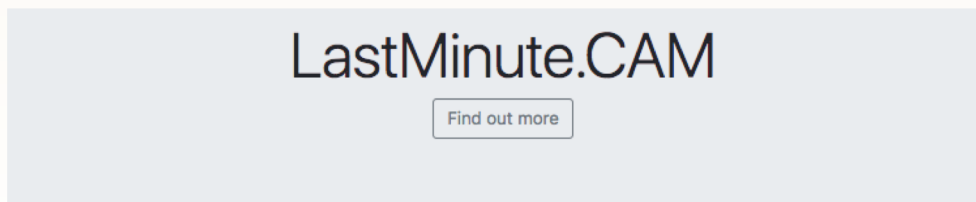
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- Simple web interface to review repository OA submissions
 - Via DSpace API
- Reduced processing times
- Better response times and communication with researchers

Next steps: Lastminute.CAM



Home Publications list

Publication information

Publication ID	Journal
798005	Arch Intern Med

Title Clinical presentation, etiology, and outcome of infective endocarditis in the 21st century: the In

Acceptance date	Online publication date	Print publication date
<input type="text"/>	<input type="text"/>	2009-03-09

Does your paper acknowledge COAF or RCUK funding? Yes No

Add authors +

Link to funding +

Select grants by funder reference

Search by Title

Search by grant identifier, e.g. EP/X/12345

Probabilistic Auditory Scene Analysis	EP/G050821/1	<input type="button" value="X"/>
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- Simple web interface to update publications information in the CRIS system
 - Via Elements API
- Enhanced researcher experience
- Collect key information in a timely manner
- Enhance compliance reporting

Thanks!