



McMaster Experts Breakout Session

J. Brodeur
McMaster IT Forum Breakout Session
11-October, 2018



Overview

- McMaster's research information landscape
- McMaster Experts
 - What is it?
 - Project development
 - Information sources and profiles
 - Opportunities, challenges, next steps
- Final questions, demos & discussion



McMaster's Research Information Landscape

Research Information: Information about researchers, their scholarly activities and output

Education & Training

Fields of expertise

Language competencies

Academic appointments

Contact information

Unique researcher IDs

Websites / Social media

About researchers



Grants

Other activities & Service
[committees, media, etc.]

Research overview

Teaching overview

Teaching activity

Publications

Co-author networks

Supervision

About their works

**Where does McMaster's research
information exist?**

How is it managed and used?

**How is it presented
to the public?**

Faculty
Webpages

Institutional
Research &
Analysis

In a spreadsheet,
somewhere

External profiles

Brighter
World

MacFacts

Many places!

Centre/Institute
Webpages

Mosaic DW

OVPR /
ROADS

External
Databases

Researcher
Webpages

Faculty & Staff
Directory

**How can (and should) we
centralize this information?**

**How to facilitate
management and reuse?**

**How can we improve public
access to this information?**

What is McMaster Experts?

**Research
Information
Management
System [RIMS]**



Elements



**Ontology +
Linked data
application for
scholarship**

VIVO

connect • share • discover



Experts



Elements

Research Information Management System [RIMS]



Elements

- A centralized, reusable scholarly activity record for all faculty.
- Uses HR data to populate profiles.
- Streamlines publication searching and management.
- Generates CVs and analysis reports.
- Add-on modules for grants, teaching, etc.
- Can be integrated with other systems via Database and API.



VIVO

- An **ontology and semantic web application** for representing scholarship.
- Uses linked open data to represent connections between researchers, their expertise, and their works.
- A widely-used, open source research and researcher discovery tool.

**Ontology +
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**Research
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Elements




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Experts



The overarching goal of McMaster Experts is to provide a central source of research information that is:

- Current, comprehensive, and accurate
- Available to all faculty and researchers across McMaster
- Acquired and curated efficiently
- Presentable to external audiences and reusable by internal users



Experts



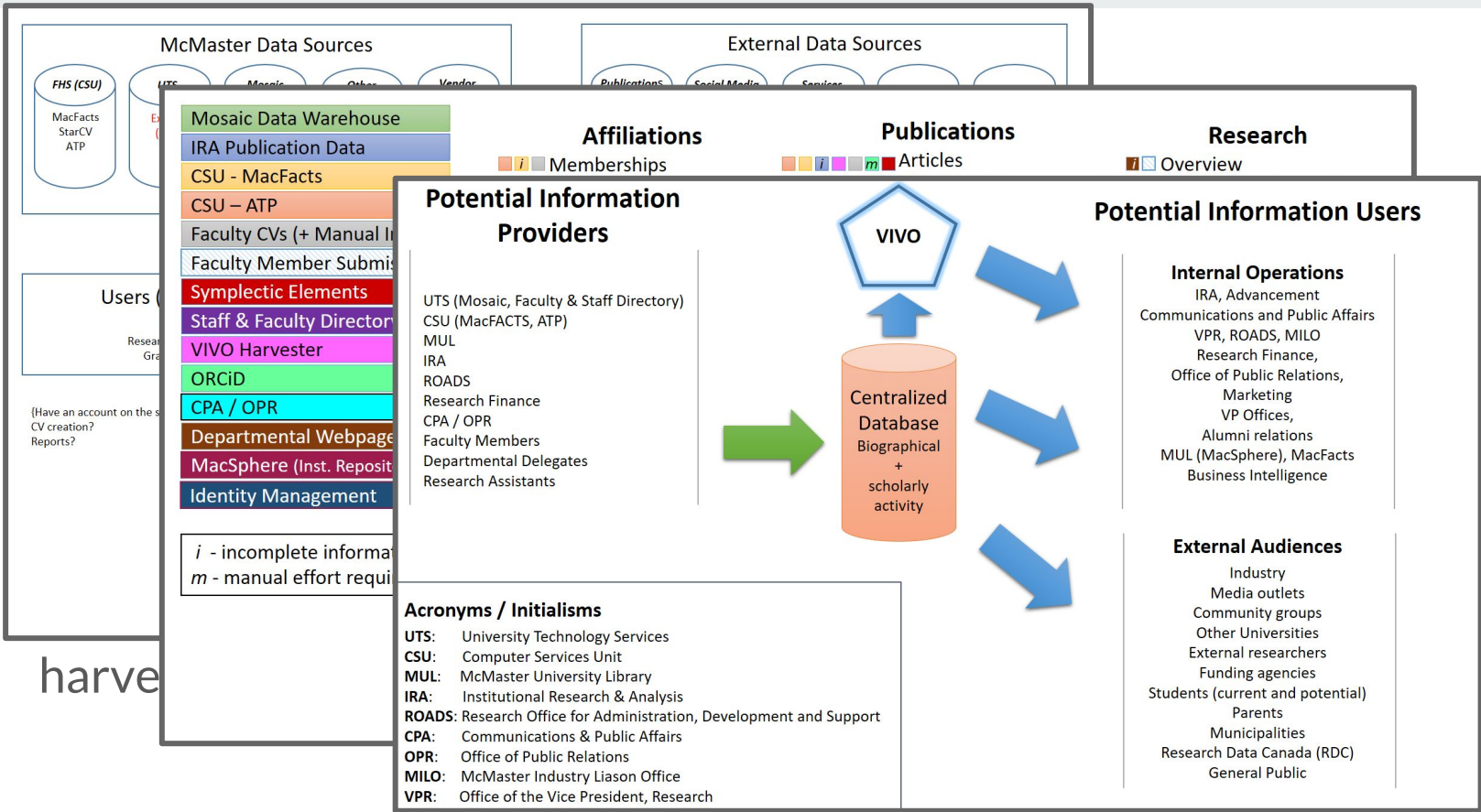
Project Development & Timeline



Early 2016

- MUL partnered with RHPCS for Provost's SAF support
 - **Goal:** Implement a pilot of VIVO software to “showcase the diverse array and depth of research performed across McMaster”
 - **Deliverables:** Faculty profiles, publication records, scholarly activities
- Formal beginning in July 2016
 - 9-month project manager
 - Project team from MUL & RHPCS





harve





2017

- Contracted Symplectic to implement Elements RIMS and VIVO connector
- Developed HR data integration
- Began initial curation of profiles and search terms
- Customized VIVO webpages to match branding standards; integrated with Brighter World





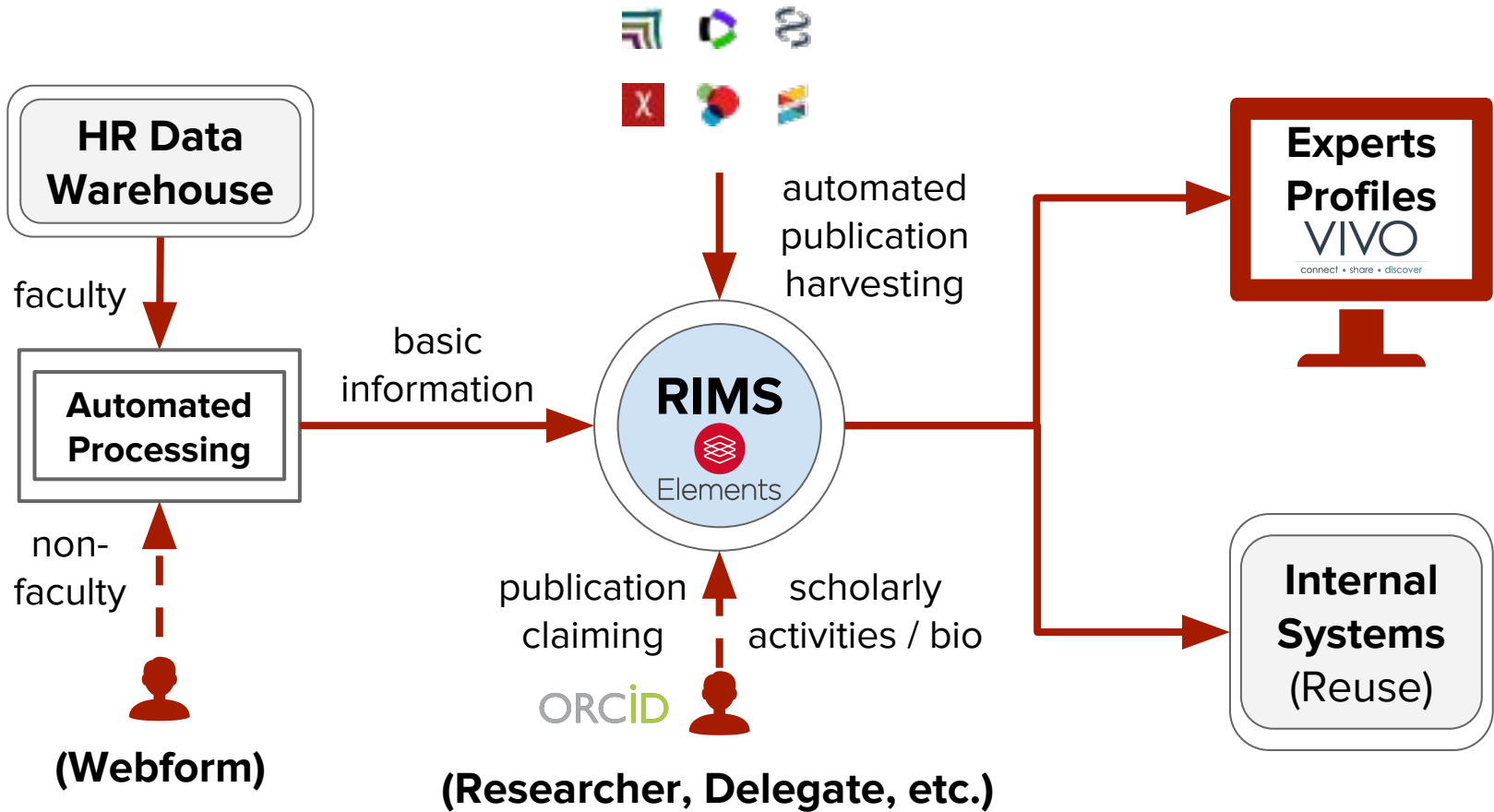
2018

- Core McMaster Experts system – transition to sustainment
 - Systems transferred to UTS servers
- User engagement and requirements gathering
 - Integrating with other systems
- Formation of McMaster Experts Advisory Committee
- Completing profile curation and publication claiming
- Hiring two positions to support McMaster Experts
 - Production Analyst (early October)
 - Technical Support Specialist (late October)





Information Sources and Profiles



Welcome, Dr. Michael Noseworthy



Faculty of Engineering
nosewor@mcmaster.ca
ORCID: 0000-0003-1464-159X

[Edit your profile](#)

My Actions (2)

1 of 2

There is **1** publication for you to claim or reject

[Claim publications](#)

My Summary



Dr. Michael Noseworthy (Edit mode)

[View profile](#) [CV and Reports](#)



Dr. Michael Noseworthy

Professor
Faculty of Engineering
Electrical and Computer Engineering
ORCID: 0000-0003-1464-159X
nosewor@mcmaster.ca

[Add an email address](#)

Work 905-525-9140 ext. 23727 [Edit](#)

[Add a phone number](#)

About Publications

About

Overview

Dr. Michael Noseworthy is a professor of electrical and computer engineering, and Co-Director of the McMaster School of Biomedical Engineering. Additionally he is special professional staff in Radiology and Nuclear Medicine at St. Joseph's Healthcare, Hamilton. He received M.Sc. and PhD degrees from the University of Guelph, specializing in applications of magnetic resonance imaging (MRI), nuclear magnetic resonance (NMR), biochemical assays, electron microscopy and electron paramagnetic resonance (EPR) methods to assess free radical induced liver and brain damage. Dr. Noseworthy's current research focuses on the assessment of tissue microstructure and metabolism using MRI and multinuclear in vivo NMR spectroscopic techniques, and the application of complex systems mathematics and machine learning for medical image analysis. He is a member of the Professional Engineers of Ontario (PEO), Institute of Electrical and Electronics Engineers (IEEE), International Society for Magnetic Resonance in Medicine (ISMRM) and European Society for Magnetic Resonance in Medicine and Biology (ESMRMB). [Edit](#)

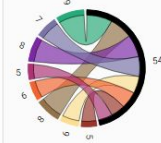
Research Areas [Edit](#)

- Artificial Intelligence and Image Processing
- Biomedical Engineering
- Image Processing
- Medical Physics
- Neurosciences
- Oncology and Carcinogenesis
- Radiology and Organ Imaging

Other profiles

- [Google Scholar](#)
- [Twitter](#)
- [ORCID](#)
- [ResearcherID](#)
- [Scopus ID](#)

Co-authors



- Jonathan Derrick Adachi (5)
- Colm Boylan (6)
- David Chettle (8)
- Markad Venkatraya Kamath (6)
- Monica Maly (5)
- Fiona McNeill (8)
- Noam Soreni (7)
- Greg Wells (9)
- Karen Beattie (2)
- John Blenkinsstock (1)
- Jackie Bosch (1)
- Scott Brimble (1)
- Sushree Das (2)

Profiles in **Elements** (expertsmanager.mcmaster.ca) are visible **only** to the researcher, delegates, and administrators. Researchers are notified when publications are waiting to be accepted (or declined) as theirs. Researchers can add overviews, ORCID IDs, research areas, links to other web pages.

McMaster Experts is McMaster University's researcher and expertise discovery gateway that aims to facilitate collaboration among academic researchers and spark increased engagement with other communities in academia, industry, and the media, locally, nationally, and internationally.

Search McMaster Experts

Search

Search for experts, by name or research area

McMaster Experts in the News

How cutting-edge archaeology can improve public health JUL 23

Eleven at McMaster named Vanier Scholars, Banting Fellows JUL 19

McMaster wins Global Teaching Excellence Award JUL 19

Hey customers, you may be right. But you don't get to be mean JUL 18

McMaster researchers explore the intersection of privacy and smart city technology JUL 18

Study suggests psychotherapy beneficial for post-surgical pain JUL 18



[Dr. Christine Wilson](#), Professor
Physics & Astronomy

About McMaster Experts

Manage my Profile

The McMaster Experts (VIVO) landing page (experts.mcmaster.ca) showcases researchers and dynamically integrates media stories.

Search

Christina Sally Moffat

Associate Professor, Anthropology



Dr. Tina Moffat is an associate professor of anthropology at McMaster, where she also received her PhD. With research perspectives grounded in biocultural and political-economic approaches, her research within biological anthropology is child health and nutrition, food insecurity, and environmental health. Dr. Moffat is heavily involved in community-based research projects; currently, she is a co-investigator on a study called "Mothers to Babies", which examines knowledge translation for ...

MORE

CONTACT INFORMATION

PHONE: 905-525-9140 ext. 23906
EMAIL: moffatcs@mcmaster.ca



Websites

- Google Scholar
- ResearchGate

Affiliations

- McMaster University
- Faculty of Social Sciences , McMaster University
- Associate Professor, Anthropology , Faculty of Social Sciences
- Department Chair, Anthropology , Faculty of Social Sciences

Scholarly Activity in McMaster Experts



MCMASTER RESEARCH HELPING DEVELOP NEW PROGRAMS FOR THOSE STRUGGLING WITH FOOD INSECURITY

McMaster researcher Tina Moffat is working with community partners on a research project aimed at finding ways to assess and improve programs designed to help ...

READ STORY



SHARE

SCHOLARLY ACTIVITY

BACKGROUND CONTACT VIEW ALL

Selected Scholarly Activity

Academic Article

- Comparing measured calcium and vitamin D intakes with perceptions of intake in Canadian young adults: insights for designing osteoporosis prevention education.. *Public Health Nutrition*. 20:1760-1767. , 2017
- Cultural Dimensions of Food Insecurity among Immigrants and Refugees. *Human Organization*. 76:15-27. , 2017
- Routledge series for creative teaching and learning in anthropology, 2nd edition. *American Journal of Human Biology*. 29. , 2017
- School meal programs and their potential to operate as school-based obesity prevention and nutrition interventions: case studies from France and Japan. *Critical Public Health*. 26:133-146. , 2016
- Comparison of infant vitamin D supplement use among Canadian-born, immigrant, and refugee mothers.. *Journal of Transcultural Nursing*. 26:261-269. , 2015

McMaster Experts (VIVO) profile pages display information from Elements records for public viewing
Tagged stories from Brighter World pulled dynamically into profiles
Full scholarly activity information available on bottom tabs



Sheila Singh

Associate Professor, Surgery

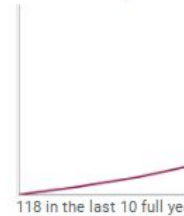
Dr. Sheila Singh is an Associate Professor in the Department of Surgery and Biochemistry. She is the Scientist Program, Director of the Pediatric Brain Tumour Study Group, and a Scientist appointed to the Research Institute (SCCRI). She holds a Canada Research Chair in Human Cancer Stem Cell Biology, from McMaster University. Her Ph.D. in Molecular Biology, and her Doctorate of Neurosurgery are from

MORE

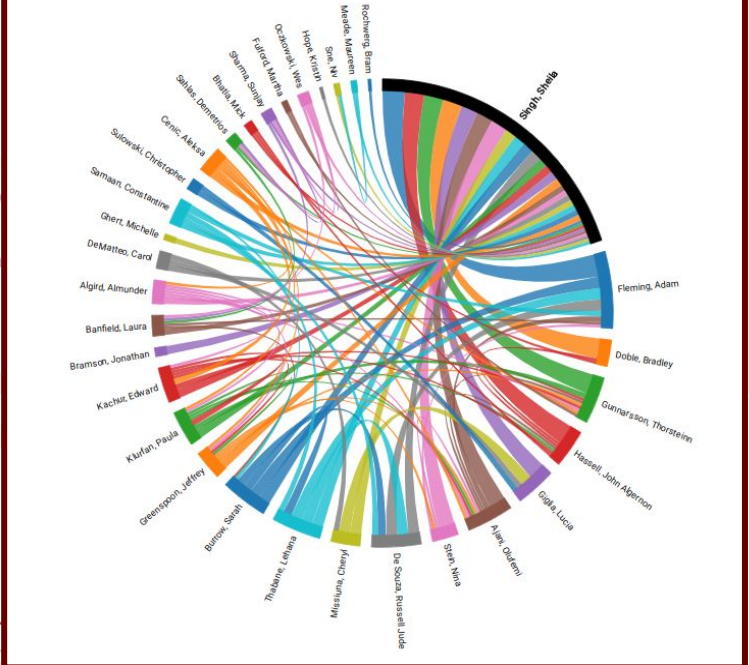
Affiliations

- McMaster University
- Faculty of Health Sciences, McMaster University
- Associate Member, Biochemistry & Biomedical Sciences, Faculty of Health Sciences
- Associate Member, Pediatrics, Faculty of Health Sciences
- Associate Professor, Surgery, Faculty of Health Sciences
- Canada Research Chair in Human Cancer Stem Cell Biology, McMaster University, 2007 -

Scholarly Act



Singh, Sheila (GraphML file)
Co-author Network (McMaster only)



CO-AUTHOR NETWORK

VIVO's ontology and linked open data enable data visualizations, such as a researcher's McMaster co-author network.

Opportunities, Challenges, Next Steps



Opportunity

- Building a complete & centralized information source
- Integrating Experts into other systems and processes
- Expanding functionality by adding modules
- Experts as central source for scholarly activity reporting
- Campus-wide adoption of ORCID ID

Challenge

- Gathering (clean) data; Ensuring profile curation
- Satisfying diverse requirements; supporting users
- Requires data source development; costs \$\$
- Requires buy-in, additional modules, profile maintenance
- Communicating value; facilitating sign-up



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Other Profile Pages & Systems

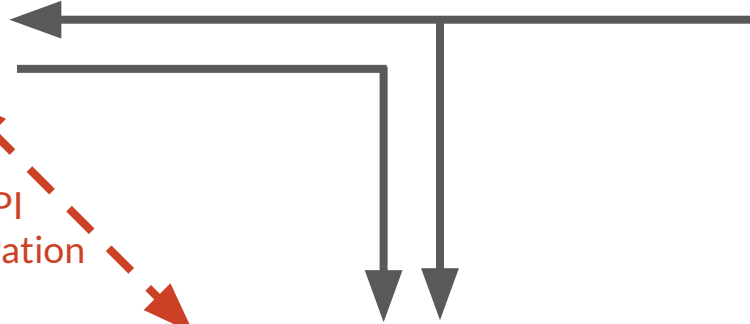
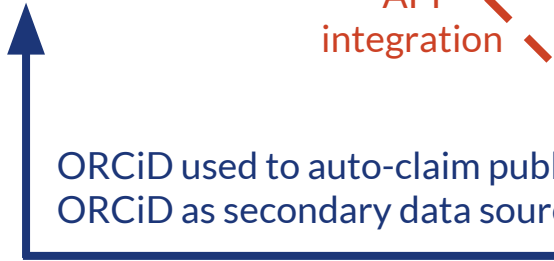
Information can be pulled dynamically from Experts to other profile pages and systems

Manually-exported bibtext files can be used to populate publication lists



API integration

ORCID used to auto-claim publications
ORCID as secondary data source





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Information

- Contact information & IDs
- Academic appointments
- Research overview
- Fields of expertise
- Education & Training
- Language competencies
- Websites / Social media
- Teaching overview
- Teaching activity
- Grants
- Publications
- Co-author network
- Other activities & Service
[committees, media,
supervision, etc.]

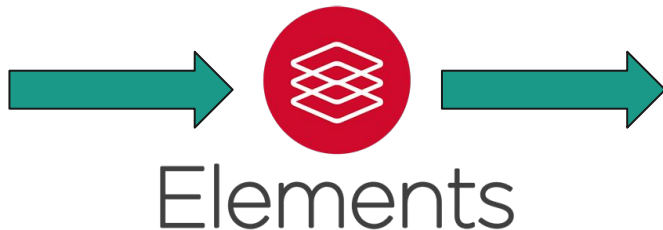


Purpose

- Populate VIVO (Experts)
- Populate other profiles
- Annual reporting
- Reuse in internal systems
- Export in other formats
- Synchronize with
external systems
- View real-time dashboards
- Design internal
assessment & workflows

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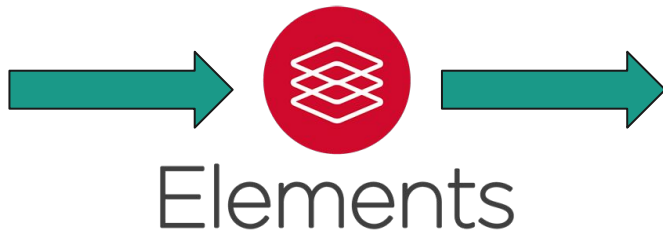


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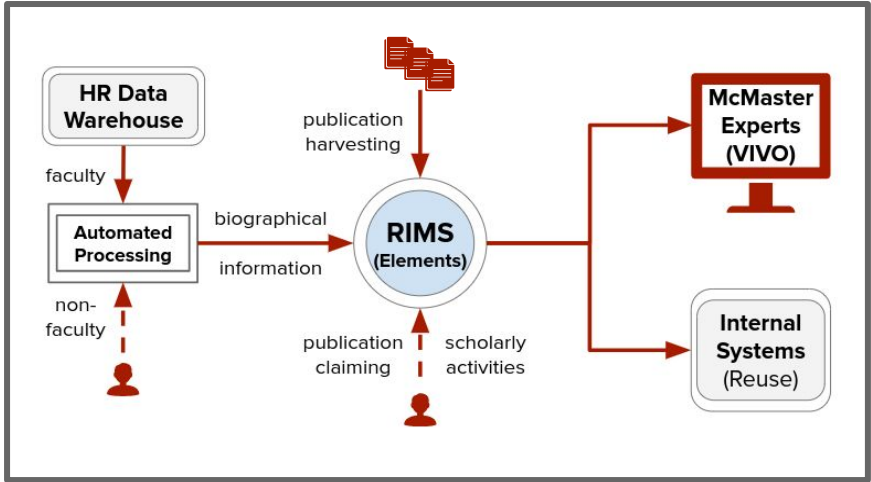
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Governance



System & Support Staff



Users

Final Questions

**What else do you
need/want to know?**

How might Experts help you?

**How can/should Experts
integrate with other systems?**

