

# Discovering insights from cross-organizational research information and collaborations

## A pilot project using Ricgraph

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[www.ricgraph.eu](http://www.ricgraph.eu)

## **What if... we look at research information as a network (graph)?**

- We have relations between items
- Related items are neighbors
- We can “walk” from one item to another
- No duplicates

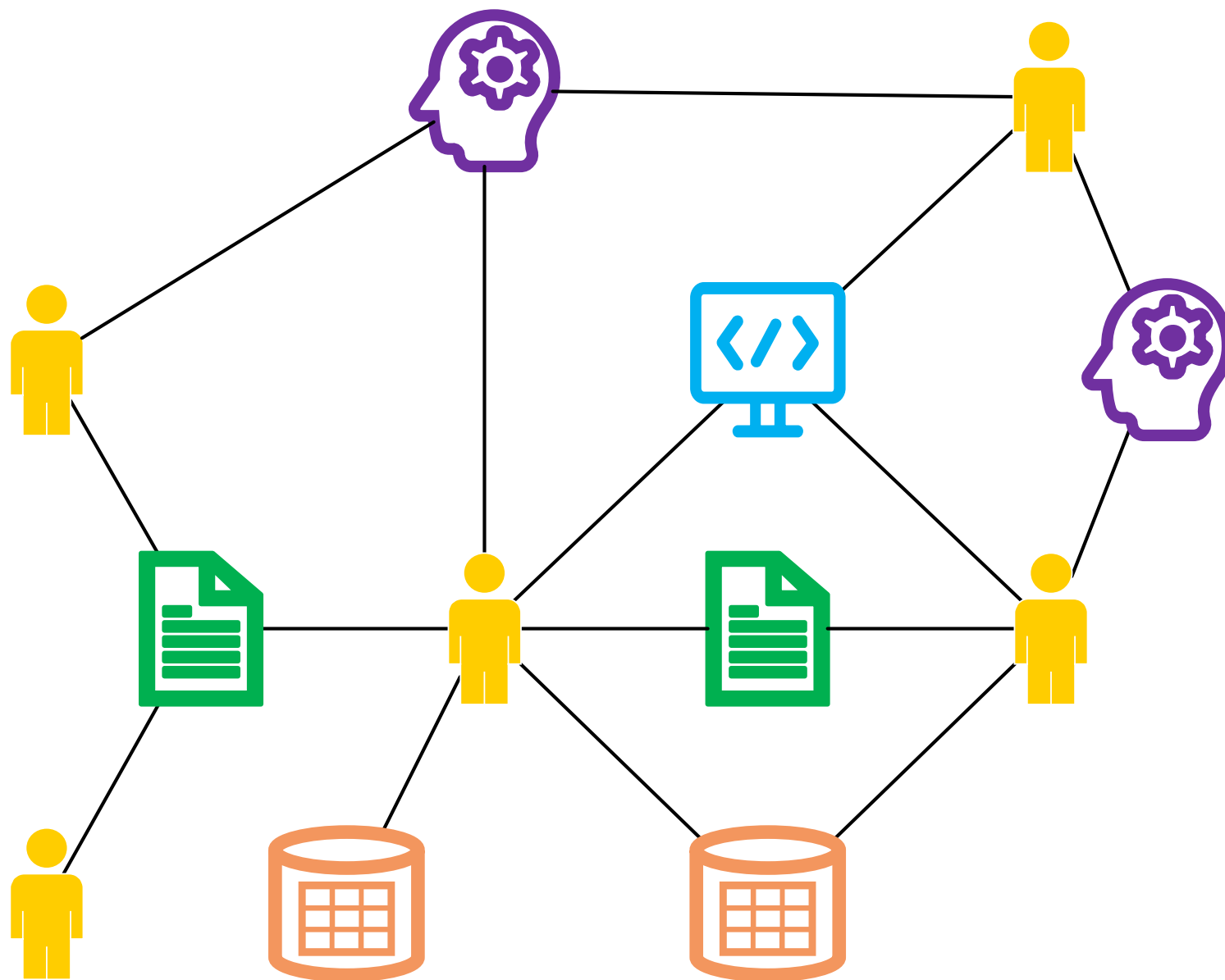
Item = person, organization, article, book, dataset, software, ...



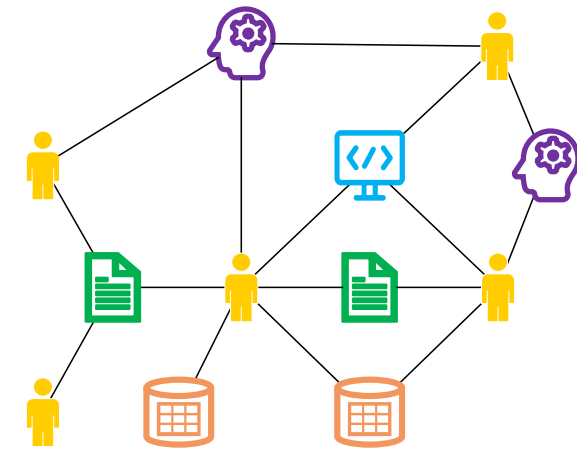
# What if...

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## What is Ricgraph - Research in context graph?

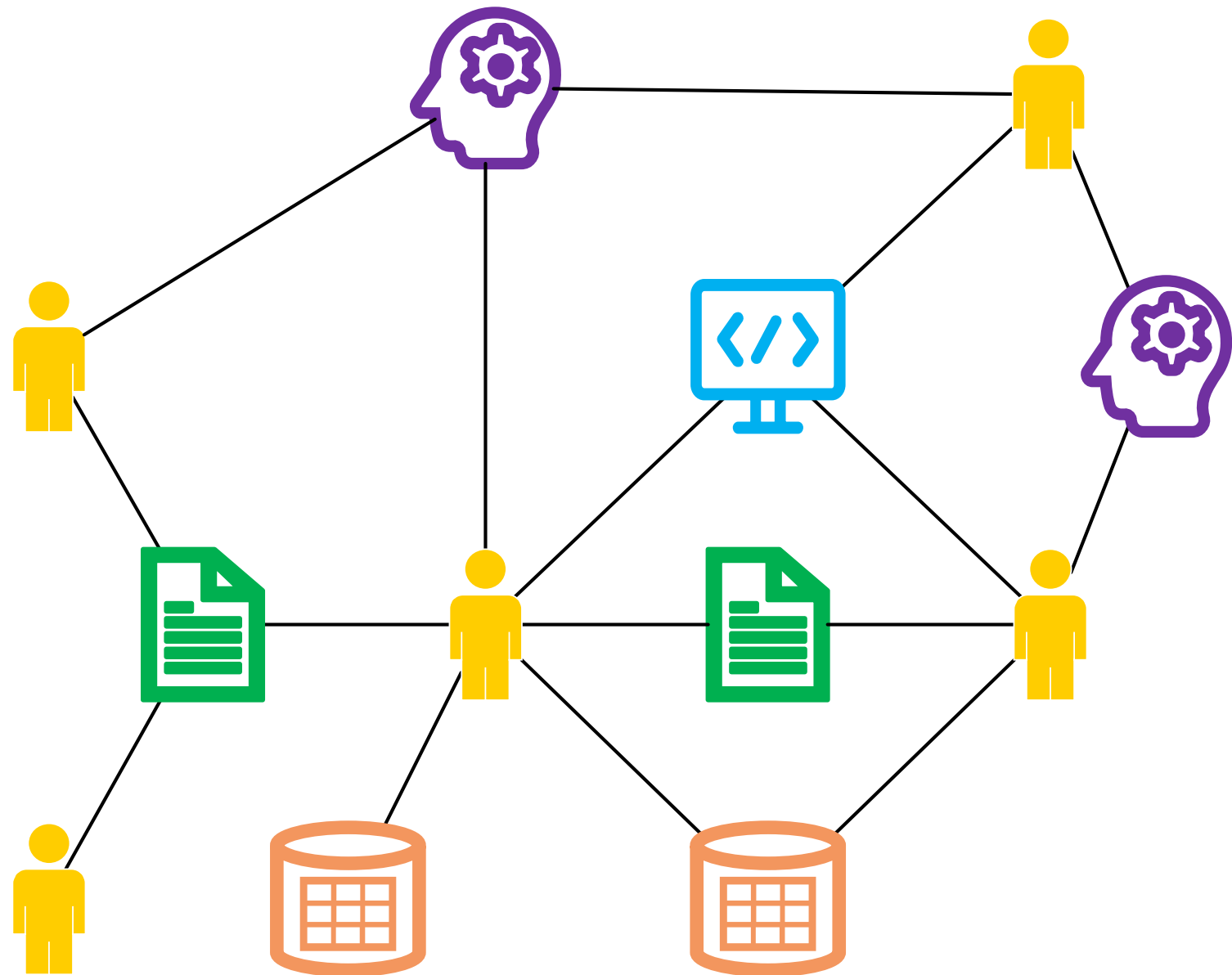
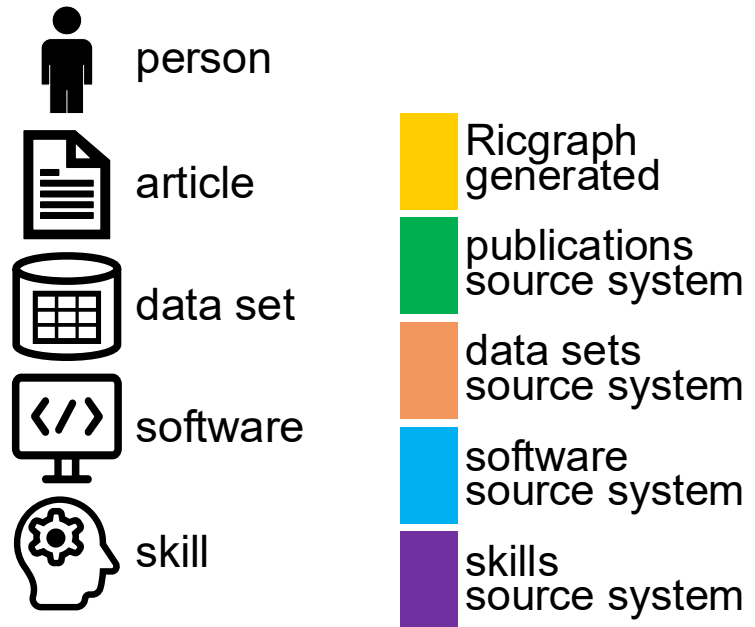


- Ricgraph can store **many types of items** in a single graph
- It harvests **multiple source systems** into a single graph
- Ricgraph **facilitates reasoning** because it infers new relations between items
- Ricgraph Explorer is the **exploration tool**
- Ricgraph has a **REST API**, to programmatically get items
- Ricgraph **can be tailored** for an application area



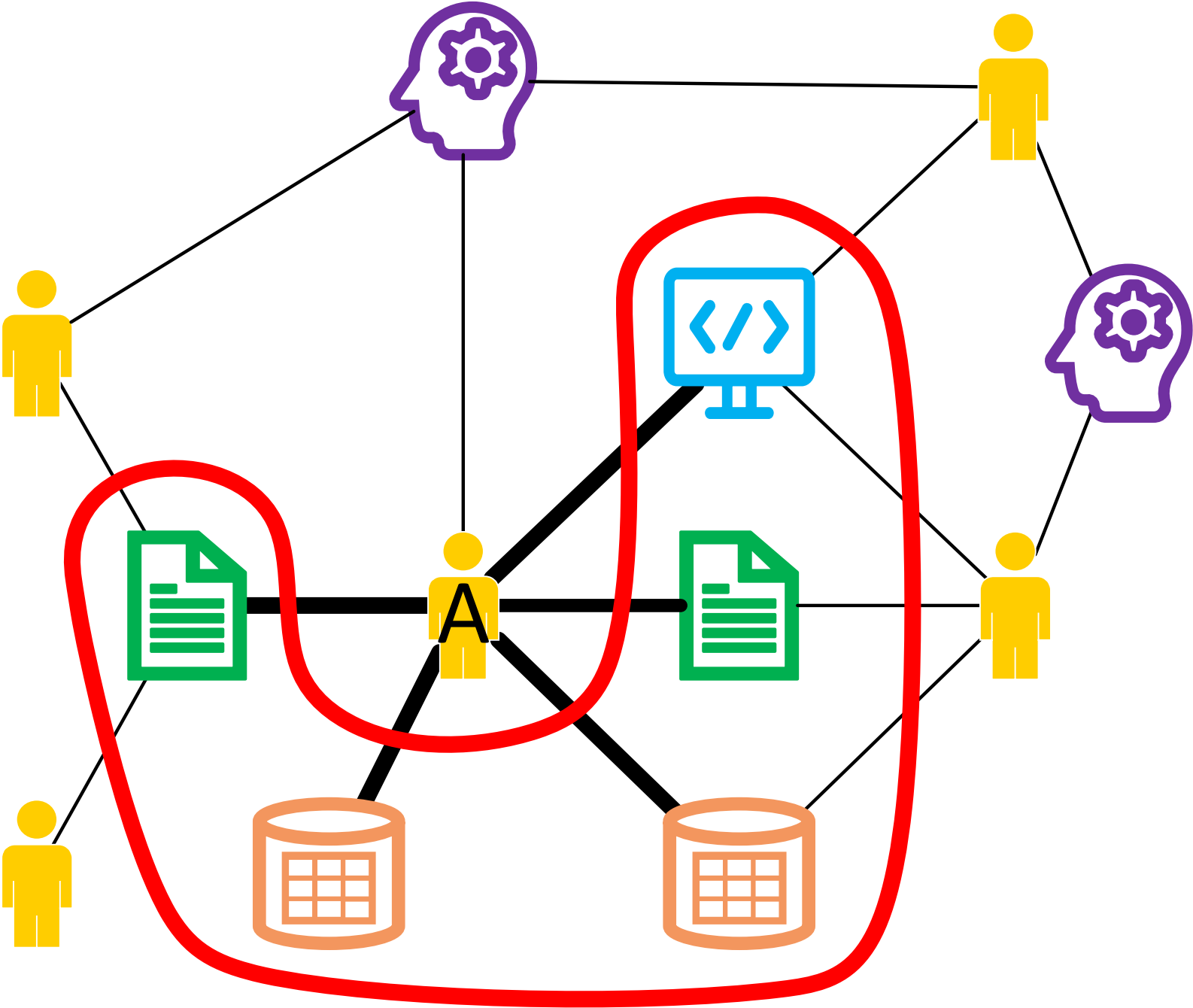
# What is Ricgraph?

- many types of items in a single graph
- multiple source systems
- facilitates reasoning: infers new relations between items



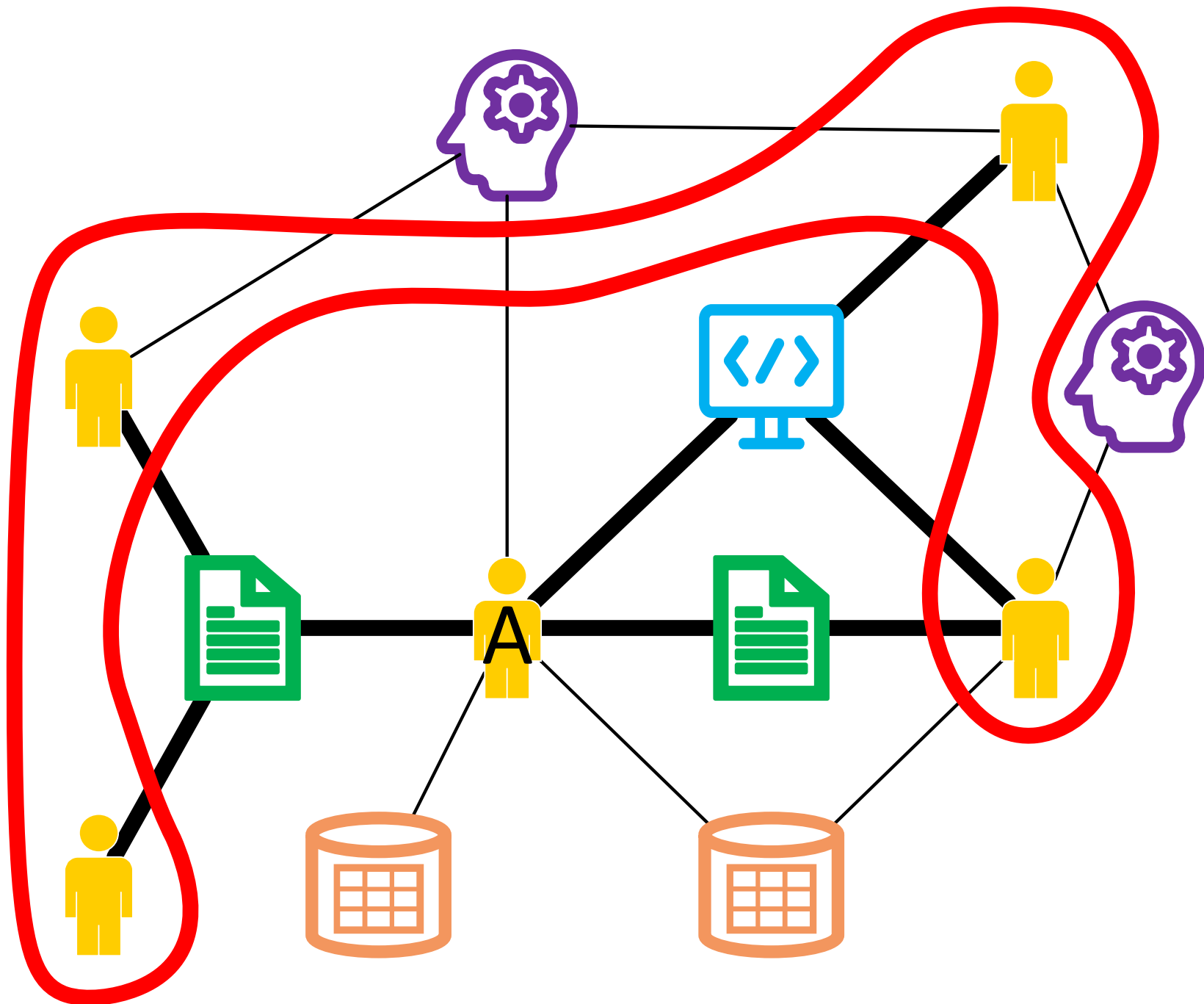
# What can Ricgraph do?

What are the research outputs of person A?



# What can Ricgraph do?

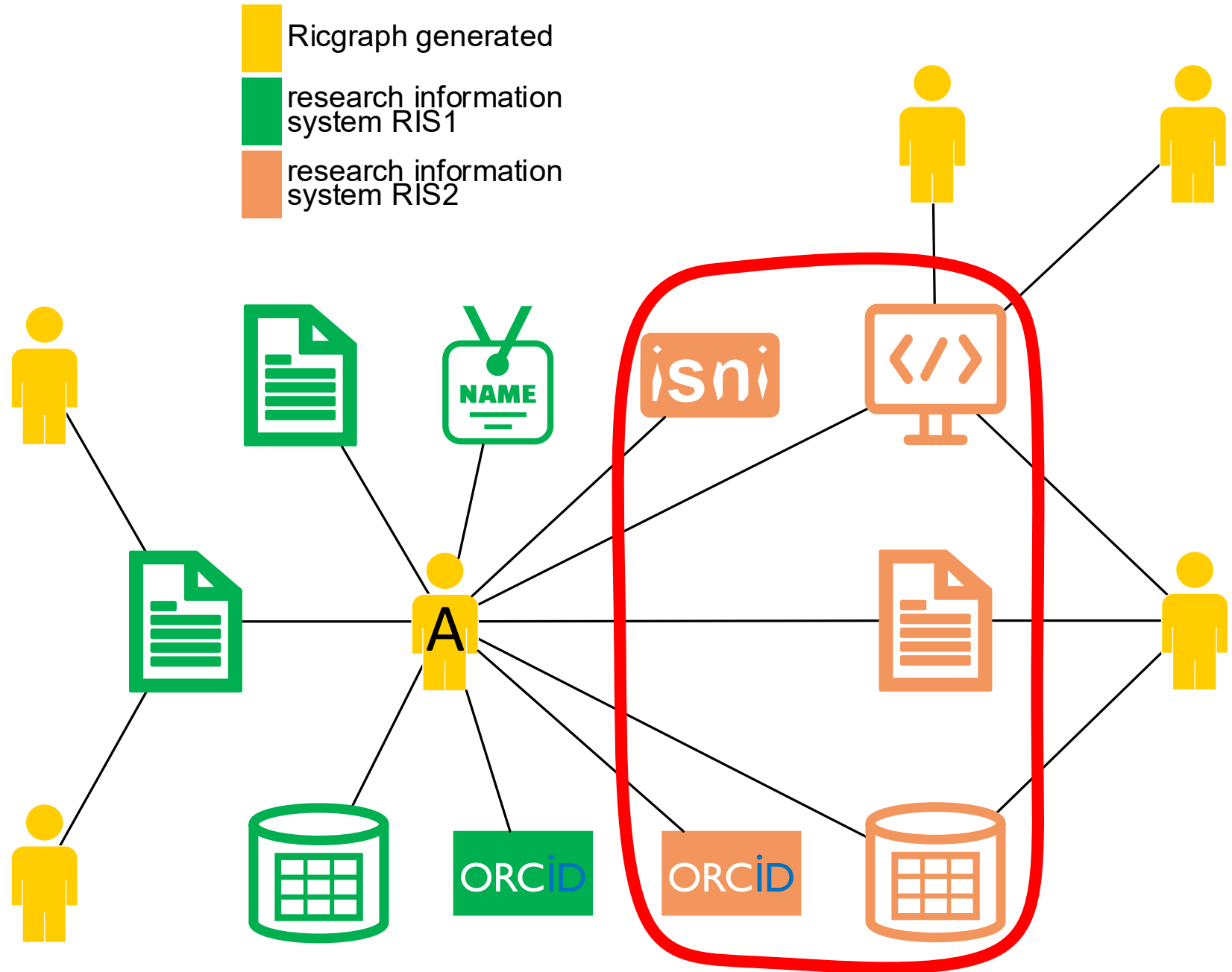
With whom has person A worked?



# What can Ricgraph do?

## Use case

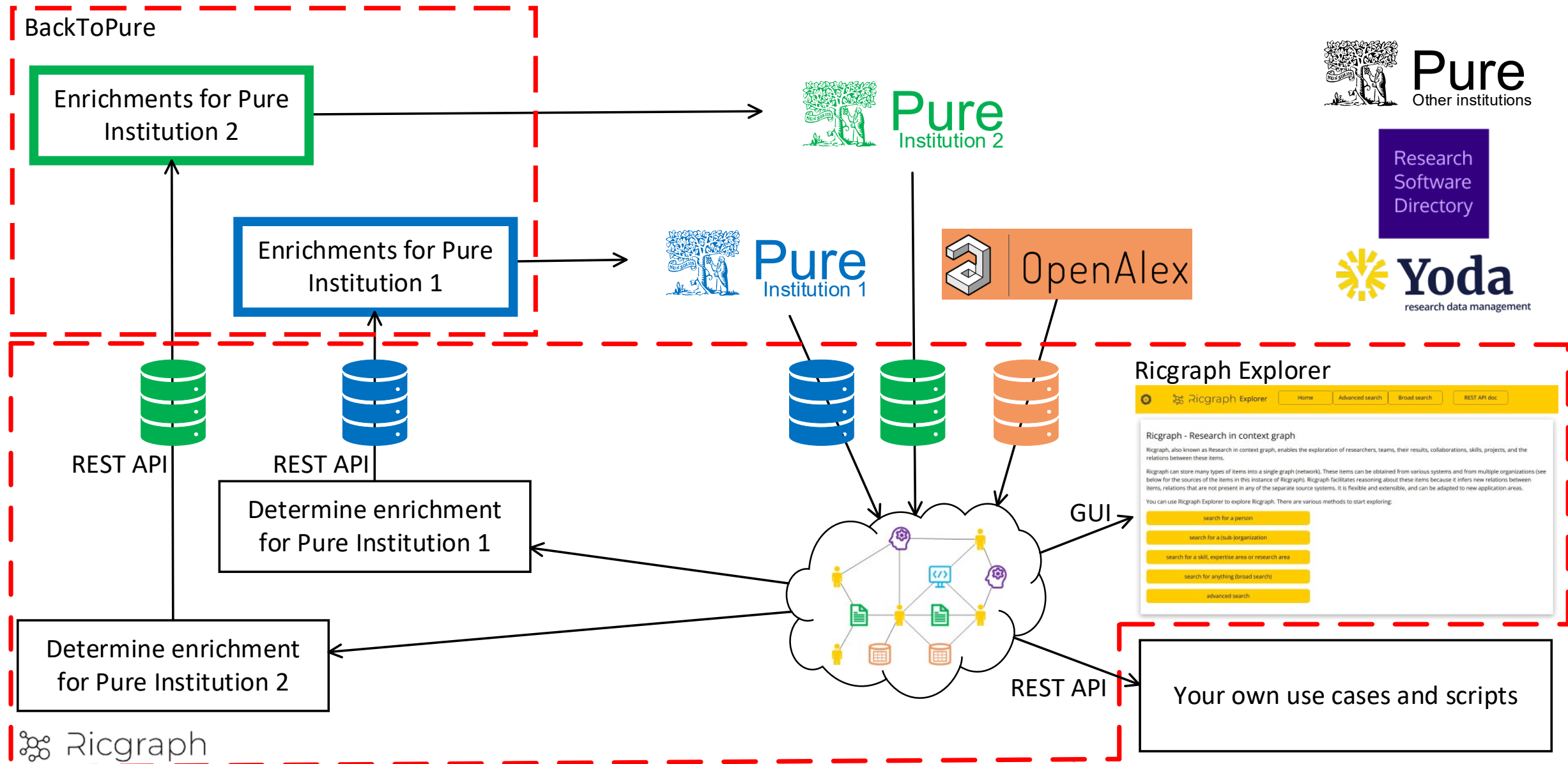
As a librarian, for researcher A, I want to enrich my local research information system RIS1 with identities and research results that are in other systems but not in ours, so that we have a more complete view of research at our university





# Pilot A: Enriching Pure data using Ricgraph and BackToPure

<https://doi.org/10.5281/zenodo.12634658>



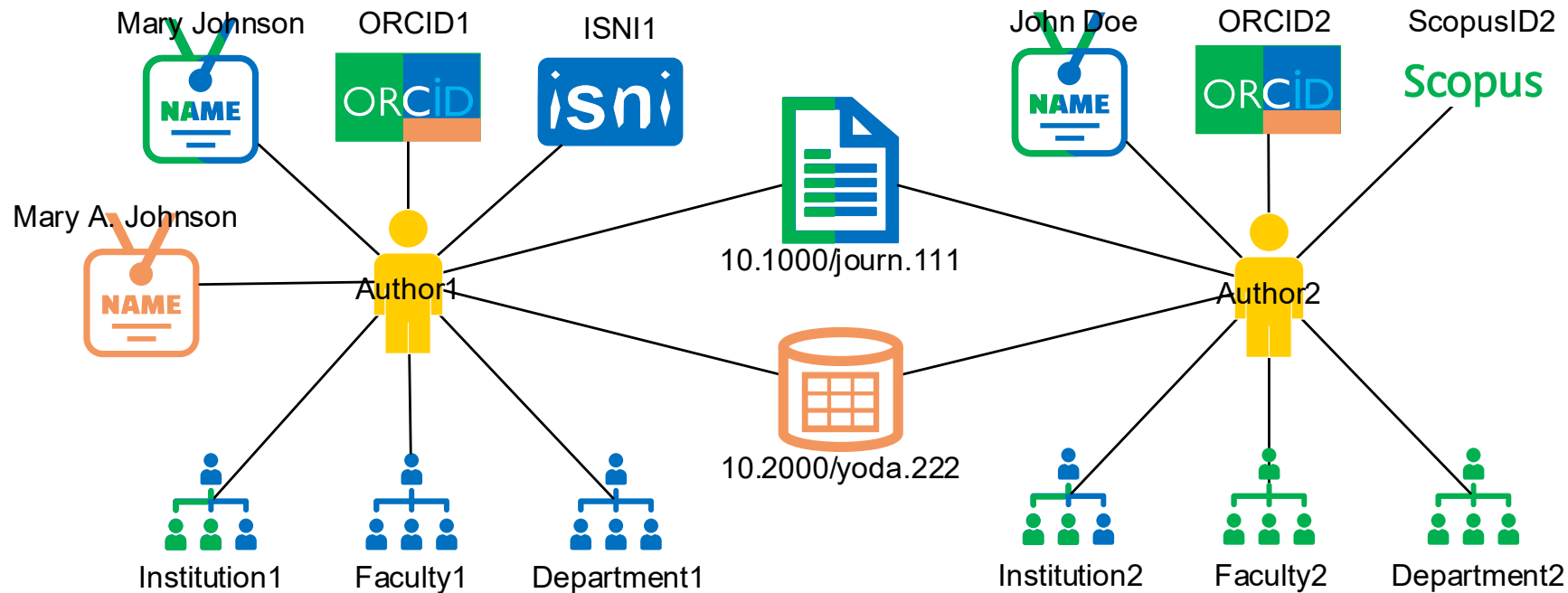
Ricgraph



Ricgraph

[Research software directory](#): research software metadata repository; [Yoda](#): research data repository

# Pilot B: Exploring collaborations between sub-organizations using Ricgraph

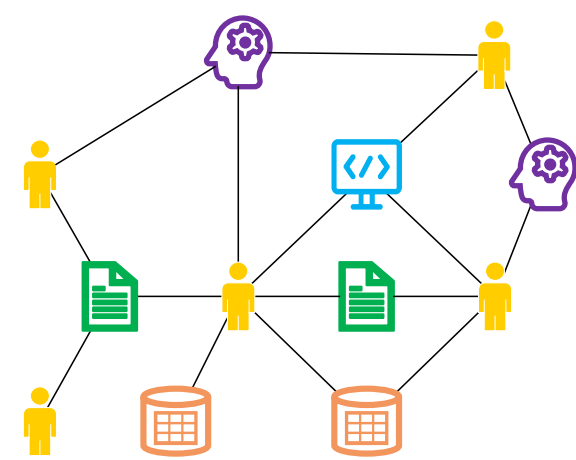


Things we may learn, that we did not know before.

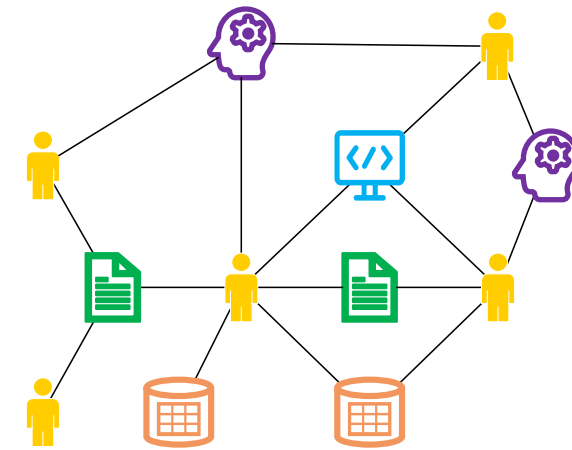
We can find relations that are not present in any source system:

- collaborations between sub-organizations, e.g., Dept1 and Dept2 work together
- the data set is from Fac1, Dept1, Fac2 and Dept2
- common research results: Fac 1 and Fac 2 have a publication and data set in common

**Questions?**  
**Demo**



## Links



- Website: [www.ricgraph.eu](http://www.ricgraph.eu)
- Reference publication: Rik D.T. Janssen (2024). Ricgraph: A flexible and extensible graph to explore research in context from various systems. *SoftwareX*, 26(101736). <https://doi.org/10.1016/j.softx.2024.101736>
- GitHub (software, documentation and videos): <https://github.com/UtrechtUniversity/ricgraph>
- Zenodo: <https://doi.org/10.5281/zenodo.7524314>
- BackToPure: <https://github.com/UtrechtUniversity/BackToPure>

More information, presentations, demos, install workshops:



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Ricgraph

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*shaping tomorrow*