

# Institutional Knowledge Map (KMAP)

Find Experts, Collaborations, and Research at the University of Arizona

The **UArizona Knowledge Map (KMAP)** helps students, faculty members, researchers, and administrators to explore the university's knowledge landscape. The KMAP collects, connects, analyzes, and visualizes scholarly research data at the University of Arizona, managed by Research, Innovation, and Impact (RII). The data includes publications, grants, project proposals, patents, courses, research areas, goals, achievements, etc. The system collects those un/semi-structured data from the internal and external sources of the university without direct input by the researchers. A large **Knowledge Graph (KG)** is built from those data. The system then provides a modern web interface to interact and conduct searches on the knowledge graph.

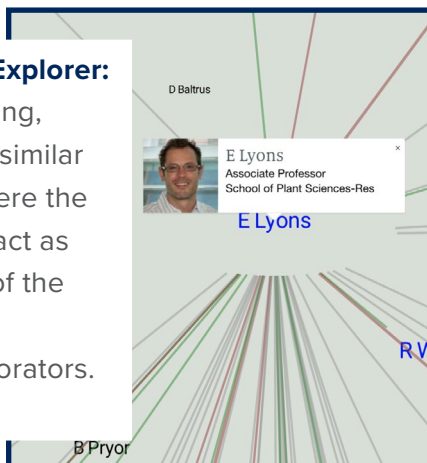
**Data:** KMAP obtains data from UAccess Research, University Analytics & Institutional Research, Tech Launch Arizona, UA profiles, UA Global Office, UA News, ORCID, grants.gov, etc.

**Process:** The system uses cutting-edge data science techniques such as machine learning, natural language processing, and information visualization.

## Key Features:

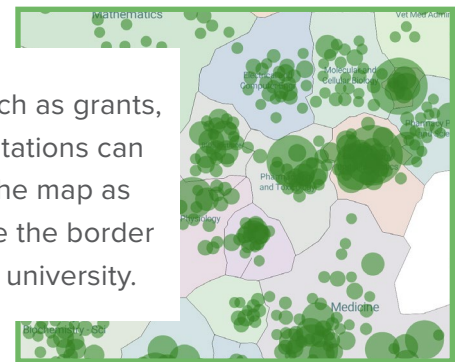
### Interactive Researcher Explorer:

The map supports zooming, panning, and navigating similar to a geography map, where the department boundaries act as the country boundaries of the map. The map allows a researcher to find collaborators.



### Overlay:

Information such as grants, patents, and citations can be shown on the map as overlays to see the border pictures of the university.



### Researcher Search:

Researchers can be searched by name, keyword about skill and expertise, and technical paragraph of text.



## KMAP Access:

**Public Interface:** The map, keyword search, and long text search are available for public use.

**Netid User:** A personal researcher dashboard can be accessed using netid login.

**API Access:** KMap's data, search results, network, etc can be accessed using KMAP's API