

# Quality Data for Safer Experiments:

## Building a Professional Partnership between Lab Workers, EHS Staff, and Chemical Information Professionals

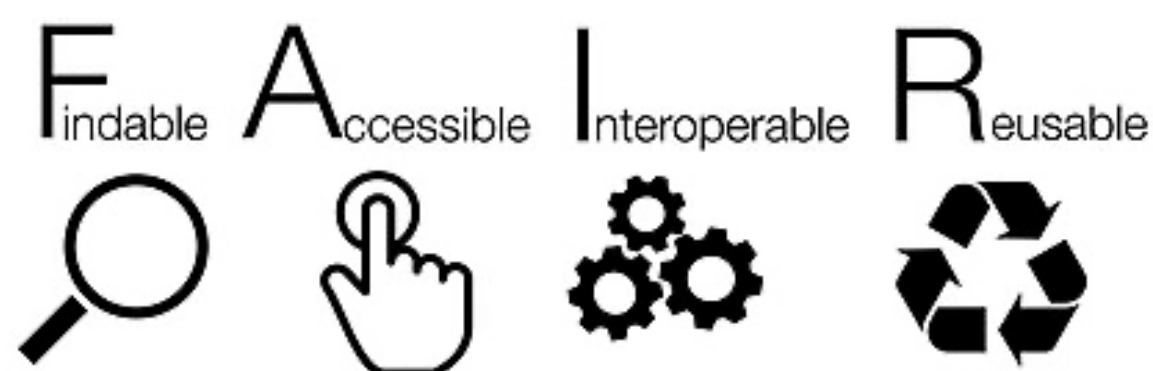
Leah McEwen, Cornell University Chemistry Librarian, and Ralph Stuart, Keene State College Chemical Hygiene Officer

### The RAMP Process

The RAMP framework organizes the risk assessment process into a multi-layered, shareable risk management strategy.



### FAIR Data Principles

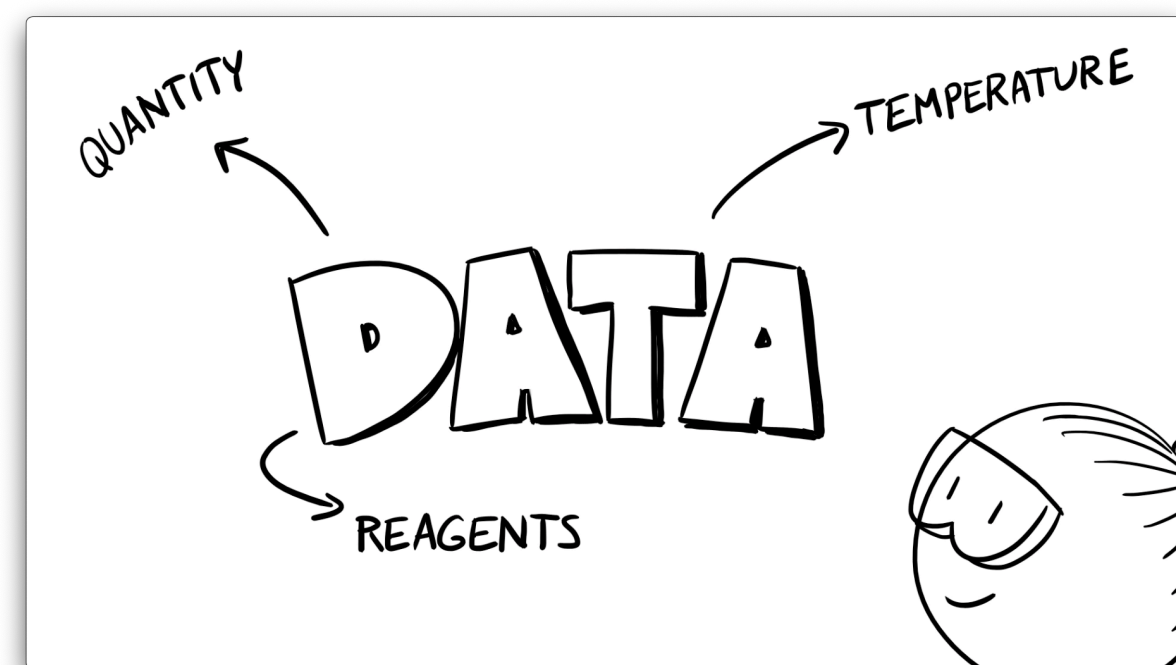


The FAIR data principles help ensure that information is consistently presented for accurate communication and analysis. FAIR data sources are well documented so you can better assess if they are fit-for-purpose and relevant for your work.

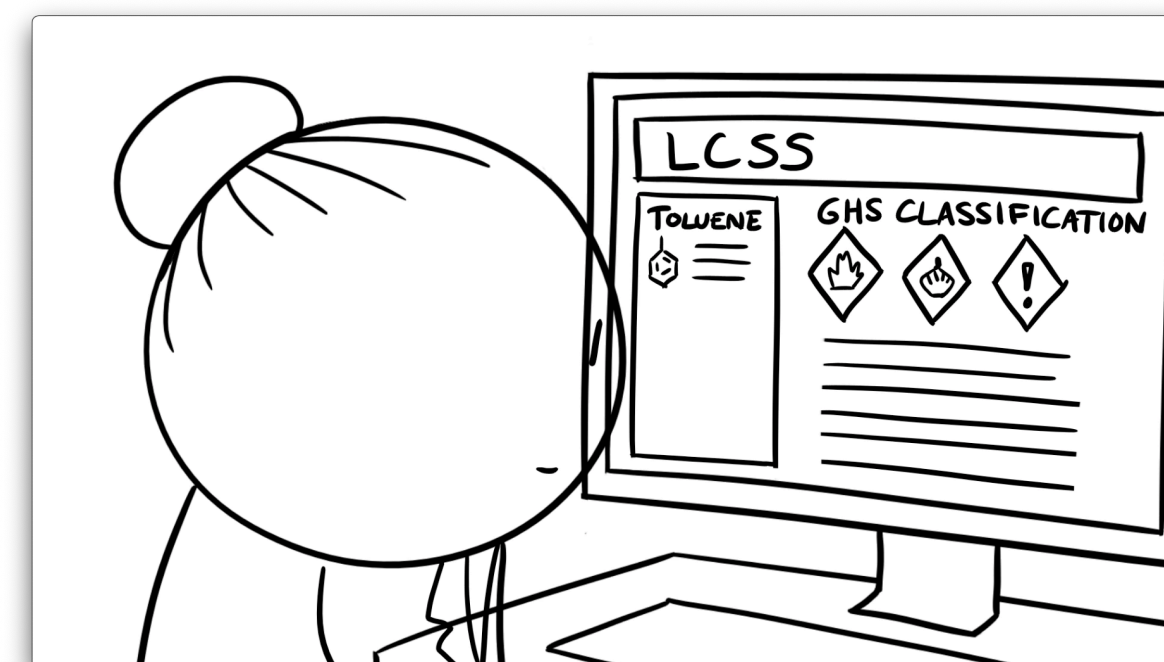
The more that FAIR data is used in the RAMP process, the more shareable and reproducible the risk assessment will be.

### Using Data in Your Risk Assessment

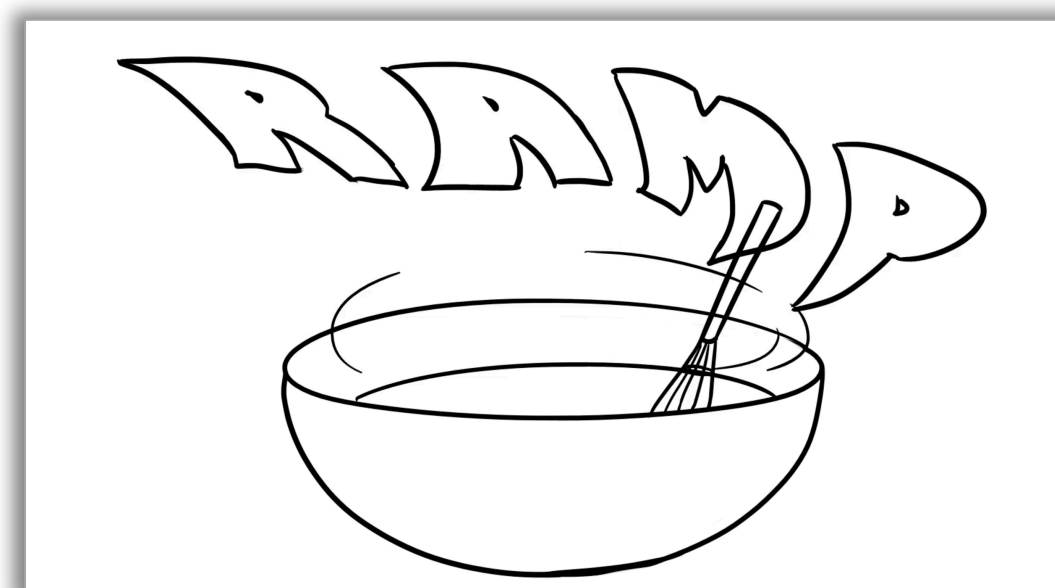
1) Recognizing hazards and assessing risks relies on data about your system.



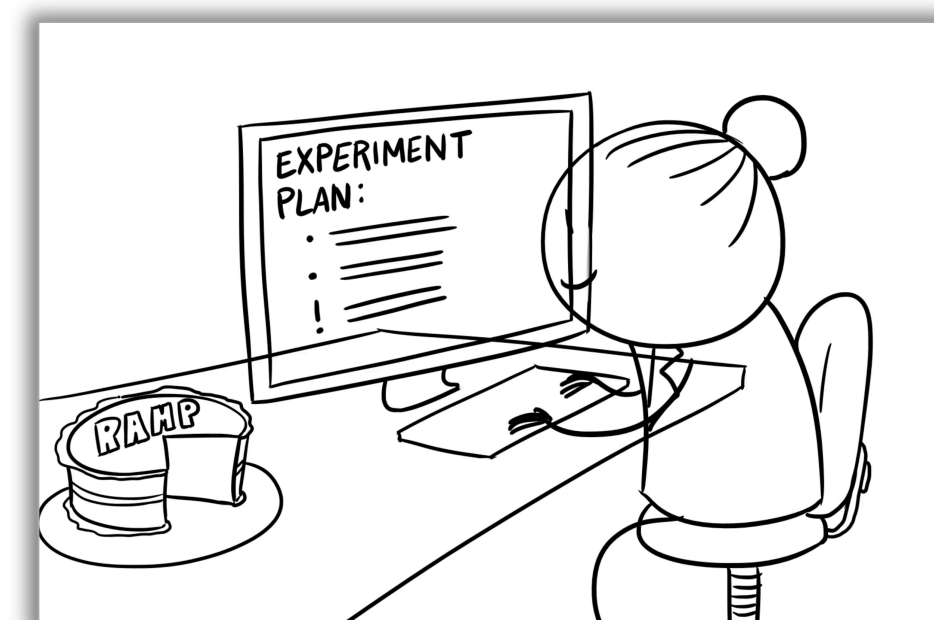
2) LCSSs from PubChem provide FAIR data about reactivity and toxicity hazards.



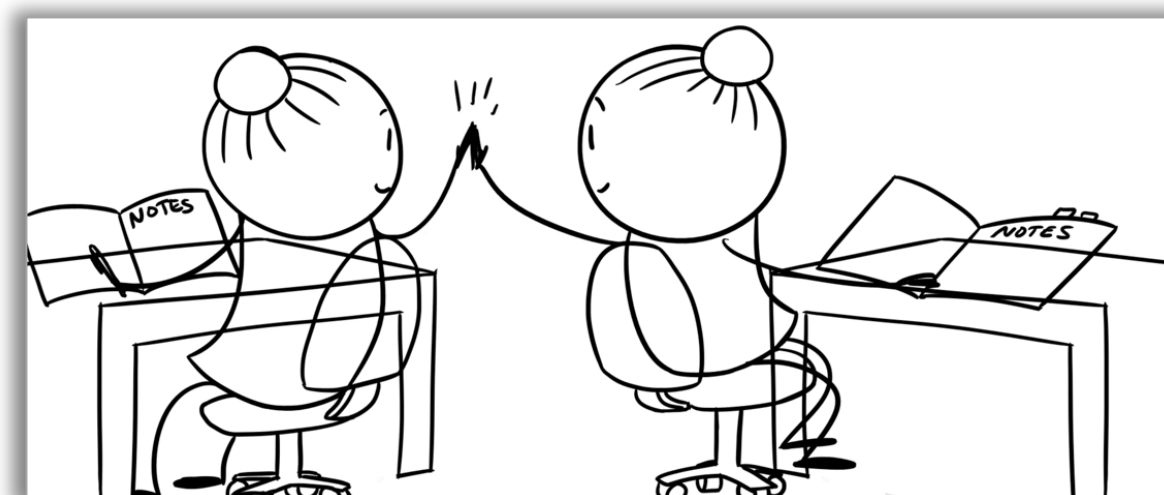
3) Applying this data through the RAMP framework supports making informed, documented decisions about risk.



4) A well documented risk assessment will help you more efficiently plan and manage your experiments.



5) Your future self will thank you for documenting your information in a FAIR manner as your work evolves.



6) Sharing your data from your risk assessment will improve the lab community's safety knowledge.



### Related Safety Resources

- *Laboratory Chemical Safety Summaries* in PubChem  
[pubchem.ncbi.nlm.nih.gov](https://pubchem.ncbi.nlm.nih.gov)
- *ACS Guide to Scholarly Communication, Communicating Safety Information* (Chapter 1.3)  
[tinyurl.com/acs-safety-chapter](https://tinyurl.com/acs-safety-chapter)
- CAS Chemical Safety Library  
[safescience.cas.org](https://safescience.cas.org)
- American Chemical Society  
[www.acs.org/safety](https://www.acs.org/safety)  
Free ACS course on “Foundations of Chemical Safety and Risk Management for Chemistry Students.”
- CHAS Health& Safety Division  
[www.dchas.org](https://www.dchas.org)  
- FAIR/RAMP cartoon video  
- Information sources & references

Share your risk assessments & lessons learned FAIRLY!

