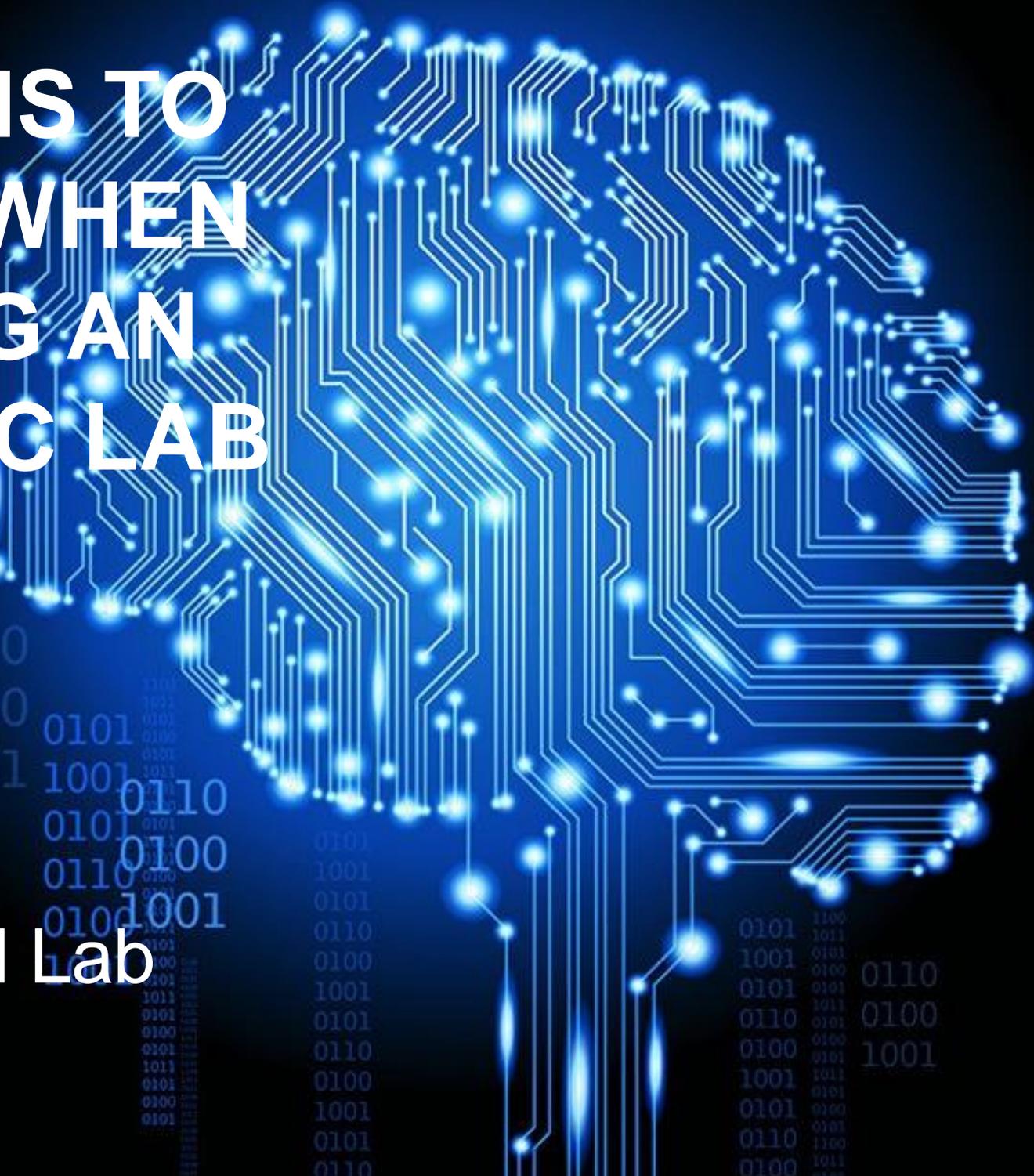# 5 QUESTIONS TO CONSIDER WHEN EVALUATING AN ELECTRONIC LAB NOTEBOOK

The Connected Lab

#Theconnectedlab

□ **Most researchers are realizing paper notebooks are not the future**

They need better data capture, better retention, better organisation and the ability to share

They just need better control

☐ **So, not surprisingly, there are growing number of electronic ones to pick from**

Some are 'home-grown'. Others tailored for labs.

They allow you to share documents and forms, annotate, draw pictures. Some have more advanced features; sample management, signing, sketching.

Heck, we even made one ourselves

But changes from funders and institutions mean PIs need to consider the bigger picture

"Metadata on the research data they hold will be published by institutions within 12 months of data generation, Data will be securely preserved for a minimum of 10 years."

EPSRC
Engineering and Physical Sciences Research Council

"NIH will explore policies to require NIH-funded researchers to make the data underlying the conclusions of peer-reviewed scientific research publications freely available in public repositories."

NIH
National Institutes of Health

Your funding agency may require that you share your data or make them publicly accessible. You should consider not only the metadata you will need to provide along with the data to make it easily understood, but also the privacy, intellectual property, copyright, or licensing issues to be addressed with regard to the sharing.

Stanford University

Responsibility for research data management through a sound research data management plan during any research project or programme lies primarily with Principal Investigators (PIs).

THE UNIVERSITY OF EDINBURGH

So when evaluating an ELN for your lab, consider the following 5 questions

1. How easy is it to get data *out* of the ELN and in what formats?

2. Will the ELN enable compliance with funder requirements?

3. Does the ELN support linking to your institution's file stores?

4. Does the ELN integrate with institutional and domain-specific repositories and archives?

5. Does the ELN enable good lab management and collaboration between labs?

How easy is it to get data *out* of the ELN and in what formats?

1. Who can get data out? Individual researchers? PIs? Administrators?

2. What data can be exported? Documents created in the ELN? Attachments and files?

3. In what formats can data be exported? PDF? HTML? XML?

Will the ELN enable compliance with funder requirements?

1. What are the key funder requirements for data produced by your researchers?

2. Will the ELN support making your researchers' data public?

3. Will the ELN support long term preservation of your researchers' data?

Does the ELN support linking to your institution's file stores?

1. Is it possible to link to file stores
from the ELN?

2. Multiple file stores or just a single store?

3. Are the stores accessible by an intuitive
and user friendly interface?

Does the ELN integrate with institutional repositories and archives?

1. Will the ELN fit comfortably in your RDM infrastructure?

2. Will it be straightforward to integrate the ELN with your institutional repository?

3. Will it be straightforward to integrate the ELN with your institutional archive?

Does the ELN enable good lab management and collaboration between labs?

1. Does the ELN have full support for group creation and management?

2. Does the ELN provide the PI with good lab administration controls and the ability to delegate admin?

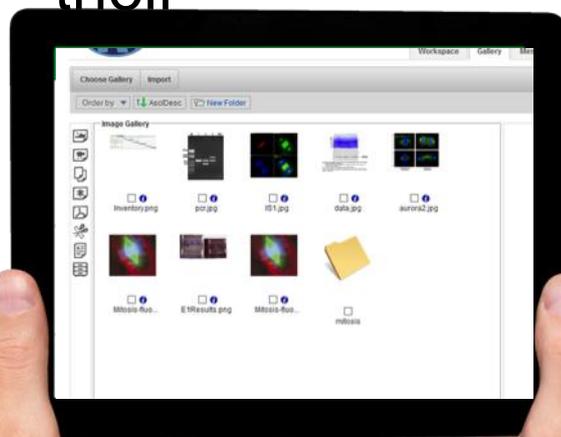**3.** Does the ELN enable structured collaboration between groups? Multiple groups?

Connect data, labs and institutions

Connecting…

- Data in the Lab
- Labs with their Institution
- Institutions with funders and the public

their

Take the [RSpace Tour](#)

Connect researchers

To their files: Box, Dropbox, Google Drive

To each other: Within the lab. To other labs

To their institution: File store, repository, archive