OneNote Laboratory Notebook Tutorial

v2019-06

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Laboratory Notebooks
What should we be doing?

• Expectations and responsibilities
  – Document what we are doing
  – Be able to find results
  – Timely/traceable/retrievable
  – Checked

• Legal responsibilities
Why OneNote?

- Digital Notebook
- Gathers notes – handwritten or typed – drawings, screen clippings, images and audio content
- Notes can be shared
OneNote

- OneNote Office 365
- OneNote Online
- OneNote 2016
- OneNote for Mac
- OneNote for Windows 10
Storing notebooks

• Where can we save OneNote notebooks?
  – Local drives (OneNote 2016)
  – Microsoft
    • OneDrive
    • SharePoint
Electronic Laboratory Notebook (ELN)

https://babraham.sharepoint.com/sites/ELN/SitePages/Home.aspx

or go to Office.com and search Sharepoint/ELN
Electronic Laboratory Notebook (ELN)
Welcome to your Electronic Notebook Repository

Use this site to create, work on, and store notebooks. This site can become a collaborative repository for authoring documents and notebooks within your group, or just a central store for individual Electronic Lab Notebooks.

A Group Documents library is also included in this site. By default, all group members have read access to any documents placed in this area. Group Leaders and Administrators have read/write access.

For extra help and assistance with setting up and customising your site, click here to access the Guides.
### Table of contents

**Thursday, March 28, 2019  11:58 AM**

<table>
<thead>
<tr>
<th>Contents</th>
<th>Table of contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocols</td>
<td></td>
</tr>
<tr>
<td>Experiment 123</td>
<td></td>
</tr>
<tr>
<td>Experiment 456</td>
<td></td>
</tr>
<tr>
<td>Experiment 789</td>
<td></td>
</tr>
</tbody>
</table>

- **Protocols**
  - Animals
  - Collection
  - Sequencing
    - Experiment 123
    - Experiment 456
    - Experiment 789
Electronic Laboratory Notebook (ELN)
Storage and organisation

SharePoint
Storage and organisation

- SharePoint
- ELN

- JM
  - Notebook 1
  - Notebook 2
  - Notebook 3

- SA
  - Notebook 1
  - Notebook 2

- FK
  - Notebook 1
  - Notebook 2
  - Notebook 3
    - Section A
    - Section B
    - Section C
      - Page 1
      - Page 2
      - Page 3

Page 1
Page 2
Page 3
Storage and organisation

SharePoint

ELN

JM

Notebook 1

Notebook 2

Notebook 3

SA

Notebook 1

Notebook 2

FK

Notebook 1

Notebook 2

Notebook 3

Section A

Section B

Section C

Page 1

Page 2

Page 3

Sub Page 1

Sub-page 2

Sub-sub-page
Exercise 1

Accessing the Electronic Laboratory Notebook (ELN) area on Sharepoint

https://babraham.sharepoint.com/sites/ELN/SitePages/Home.aspx
Getting started
What is a Page?

It’s not a word document...

... It’s a stream of consciousness...
What is a Page?


Proin euismod, dui sed tempus ultrices, nisl tortor aliquam nisi, ac placerat purus turpis. Nulla euismod, enim id congue, libero turpis faucibus nisl, eu feugiat justo libero.

Protocol

First, we collected some water. Then, we heated the water.

To make tea:
Boil the water (only once – Jo is very fussy about using freshly drawn water and not re-boiling it. Simon thinks this is nonsense). Then, add hot water to tea of choice for required time. Add milk/milk alternative/sugar as required.

To make coffee:
See separate protocol below as there are many sources of coffee and machines with which to provide it.
Add Sections and Pages

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Name this page</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Section 1</td>
<td>Page B</td>
</tr>
<tr>
<td>Test section</td>
<td>Page C</td>
</tr>
</tbody>
</table>

Add Sections
Add Sections
Add Sections
Add Sections

RNA Seq
Tuesday, March 26, 2019 3:47 PM

- Protocols
- Bioinformatics
- Experiment 1
  - 10X Single cell RNA Seq
  - DNA methylation

Test section
Pages
Pages

OneNote Online | JM › JM notebook1 | JM notebook1

File | Home | Insert | Draw | View | Print | Tell me what you want to do | Open in OneNote

Undo | Clipboard | Basic Text | Styles

RNA Seq
Tuesday, March 26, 2019 3:47 PM

Contents
- Protocols
  - 10X Single cell RNA Seq
- Bioinformatics
- Experiment 1
- Test section

RNA Seq
- 10X Single cell RNA Seq
- DNA methylation
Add sub pages
Exercise 2

Opening a new OneNote (Online) notebook and setting it up
Exercise 2

Create a Notebook to look like this – sections, colours, pages, titles and levels of organisation
What can you do in OneNote?
What can you do in OneNote?

- Add text
- Make tables
- Insert images
- Insert/attach files
- Add links
Stuff you don’t need

- Audio
- Translation tool
- Stickers
- Emojis 😊
- ...things you don’t need in a laboratory notebook
How to add things

New page
Wednesday, March 27, 2019  9:25 AM

Click anywhere on the page to start typing.
Click anywhere on the page to start typing.
Tables

Text page

Tuesday, March 26, 2019  3:08 PM

Click anywhere on the page to start typing.

<table>
<thead>
<tr>
<th>Name</th>
<th>Biscuit choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simon</td>
<td>Jammie dodger</td>
</tr>
<tr>
<td>Jo</td>
<td>Ginger nut</td>
</tr>
<tr>
<td>Anne</td>
<td>Chocolate</td>
</tr>
</tbody>
</table>
Images

- File
- Web search
- Clipboard
  - copy & paste
  - screen grab/clip
Images
Images

+ Shift + S

+ Shift + 4
Exercise 3

Adding text, tables, formatting and images
Exercise 3

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse at maximus laus. Eu pretium turpis.
Mauris non scelerisque, molestie mi sed, maximus urna. Cras aliquam interdum lectus vitae consect et.
Pellentesque porta gravida tempus. Pellentesque maximus, cras sed hendrerit ullamcorper, id aliquet vestibulum nunc, a semper tempus turpis vel eu. Proin sollicitudin, nunc sed bibendum tempus, nisi velit interdum veniam, ultricies posuere magna nunc eget nunc. Fusce id rhoncus dui.

Quisque ac metus sit amet leo mattis gravida eu in lacus. Donec urna mauris, congue ac augue et, ullamcorper quis enim. Donec volutpat vehicula dui. Proin sed lobortis urna. Volutpat eu massa euismod, non imperdiet ligula. Donec scelerisque enim, ac tristique ante accumsan vel.


<table>
<thead>
<tr>
<th></th>
<th>Biscuit</th>
<th>Tea</th>
<th>Coffee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simon</td>
<td>Jammile Dodger</td>
<td>Builders</td>
<td>occasionally</td>
</tr>
<tr>
<td>Anne</td>
<td>occasionally</td>
<td>froth milk, 2 sugars</td>
<td></td>
</tr>
<tr>
<td>Felix</td>
<td>Lebkuchen</td>
<td>various</td>
<td>Caution: extremely fussy</td>
</tr>
<tr>
<td>Jo</td>
<td>any</td>
<td>Weak, black, no milk</td>
<td></td>
</tr>
<tr>
<td>Laura</td>
<td>Millionaire's shortbread</td>
<td>milk</td>
<td></td>
</tr>
</tbody>
</table>

Protocol

First we collected some water.
Then we filtered the water.

To make tea:
Boil the water (only once – Jo is very fussy about using freshly drawn water and not re-boiling it. Simon thinks this is nonsensical).
Then apply hot water to tea of choice for required time. Add milk/milk alternative/sugar as required.

To make coffee:
See separate protocol [here] as there are many sources of coffee and machines with which to provide it in Bioinformatics.
Add files and links

• File
  – Attachment
  – File printout

• Link
  – Point elsewhere
Insert a File
Insert a File
Add links
Add links

• Link to files stored elsewhere
  – Large datasets
  – Obligations regarding finding data
Add links

• Link to files stored elsewhere
  - Direct link doesn’t work – tries to make the file path a URL
  - 2 options
Add links

1. Give file location
   - **Shift + Right Click** on file in finder > *copy as path*
   - Paste text into OneNote as a record of where the file is stored
   - Make sure the file location doesn’t change
Add links
Add links

"O:\Training\training course checklist.docx"
Add links

2. Turn the path into a URL
   • Remove ‘http’ and type ‘file://’ at the start, remove all backslashes (\) and replace with forward slashes (/)
   • Not a dynamic link
   • Copy this link into browser and it should go to file location
Exercise 4

Adding files and links
Other useful stuff

• Draw
• To Do list
• Quick note
Draw

Text page
Tuesday, March 26, 2019  3:08 PM

Click anywhere on the page to start typing

Add text boxes anywhere and move them
Write notes on slides

- Send PowerPoint or Word docs to OneNote
- Annotate with a stylus on your tablet
- Highlight and finger-paint

in your taskbar

OR

+ N on your keyboard
Annotate images
Annotate images
To Do list

Make a cup of tea

Make a Cup of tea

Insert data

Write protocol files and link

Is it in that reference?
Add a Time and Date stamp

Getting started
28 November 2018 10:19

28/11/2018 10:41
Table of Contents

• Create a Table of Contents with Links
• 2016: Insert > Link > My Notebook
  and navigate through the Sections/pages to add
• OneNote 2016, 10 and mac
  [[pagetitleofexistingpage]]
• OneNote Online – copy URL for notebook/section/page and add this as a link
Table of Contents

RNA Seq
Tuesday, March 26, 2019 3:47 PM

10X Single cell RNA Seq

Link
Display text:
DNA methylation
Address:
https://babraham.sharepoint.com/sites/ELN/JM_layouts/15/Wopi

Insert  Cancel
Page backgrounds and lines

- View > Paper Style
- View > Paper color
Other hints and tips

• Indent and outdent

• Alt + Shift +

• Rearrange order in a list using

• Alt + Shift +
Other hints and tips

• Maths functions

OneNote 10

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Maths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maths</td>
</tr>
</tbody>
</table>

Get started with Maths

1. ✍️ Write your equation in ink or type it using the keyboard

2. 🔄 Select your equation

3. ✉️ Tap the Maths button

Quick Start Examples

| Solve for x, y | \[
\begin{align*}
x + y &= 3 \\
x - y &= 1
\end{align*}
|---|---|
| Plot in 2D | \[
\frac{x^2 + 5x + 1}{x^2 + 1}
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Round</td>
<td>5.65</td>
</tr>
</tbody>
</table>
Search Text
Search Text in an Image
References

• OneNote is not a reference management system

• You can link to a reference management system such as Reference Manager or EndNote if you must
Exercise 5

Other useful tools
Sharing OneNote notebooks

- Sharepoint ELN
- OneDrive
- Other locations
Sharing OneNote notebooks
Versions
Versions

3/28/2019 Jo Montgom...
3/28/2019 Jo Montgom...
3/28/2019 Jo Montgom...

You can:
- Attach a file
- If you amend the or paper notebook.
- You can add a
- With bigger d have their own
- Or Just referen
Exercise 6

Share your notebook with someone in the room
Suggestions for use as a Laboratory Notebook

Sequencing data
20 March 2019  08:56

You can link to Sierra (although the person reading/accessing would need log in access) or just reference where it is stored.

- Link
- Or include reference to it eg https://www.bioinformatics.babraham.ac.uk/sierra/sierra.pl?action=view&lane&lane_id=1970

It may also be useful to include a few snips/screen shots to aid explanation and understanding.

Example Laboratory Notebook

https://tinyurl.com/labbooklayout
Exercise 7

Set up an outline for a laboratory notebook to suit your experiments
The future: Windows 10 and Office 2019

• Microsoft is ‘sunsetting’ OneNote2016
• OneNote for Windows10 looks more like the mac or online version
The future: Windows 10 and Office 2019

• There are some NEW features in OneNote 10 which aren’t available in OneNote 2016.
• Microsoft is recreating popular OneNote 2016 features in OneNote for Windows 10.
• OneNote 2016 still has a number of features that OneNote for Windows 10 lacks...
• Some are scheduled for OneNote for Windows 10 and some aren’t...
Further help

https://support.office.com
Further help

• Access or technical issues: Computing
  computing@babraham.ac.uk
  x6222

• Babraham Bioinformatics
  jo.montgomery@babraham.ac.uk
  http://www.bioinformatics.babraham.ac.uk/training.html