



**UCL**

**Expand**

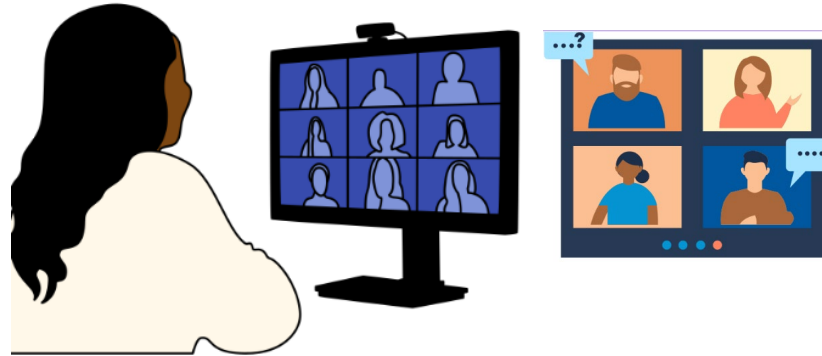
**Life and Health  
Sciences**

# Sessions



Critical Thinking 28<sup>th</sup> February

Pre-session tasks



Session Activities

Extra Resources

Drop In Sessions



- Cameras on please
- No question is silly
- An eagerness to learn, share ideas and HAVE FUN !
- Attempt pre-session activities ( take less than 15 mins)



Research & Analysis 21<sup>st</sup>

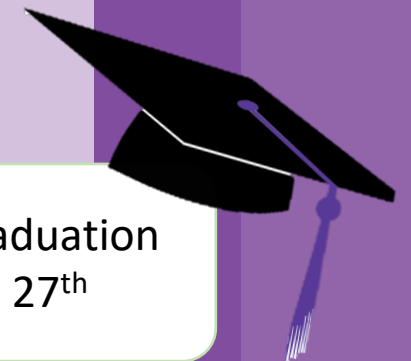
**Critical Thinking 28<sup>th</sup>**

Project Work 6<sup>th</sup>

Academic Writing 13<sup>th</sup>

Presentation & Debate 20<sup>th</sup>

Graduation 27<sup>th</sup>



# Overview



## Research and Analysis (21<sup>st</sup> Feb)

Understanding of **how to investigate a topic**, how to distinguish between **reputable and un-reputable sources** of information, and the ability to **examine the implications of your research**.

Monday  
Drop In  
Sessions

## Critical Analysis (28<sup>th</sup> Feb)

Understanding of **how to analyse sources to form a judgement**, the ability to **challenge your own assumptions** and take multiple perspectives on an issue, and awareness of the **difference between a fact and an opinion**

6<sup>th</sup> March

Project  
work

## Academic Writing 13<sup>th</sup> March

Understanding of the **formality, objectivity and precision required to write academically**. To learn how to communicate your project work in an academic capacity, and **how to form conclusions**.

## Presentation and Debate 20<sup>th</sup> March

Understanding of **delivering a clear and persuasive argument**, creating a clear **presentation structure** and the ability to **listen to and answer questions**. This session will directly contribute to the presentation of your projects during the in-person Graduation even

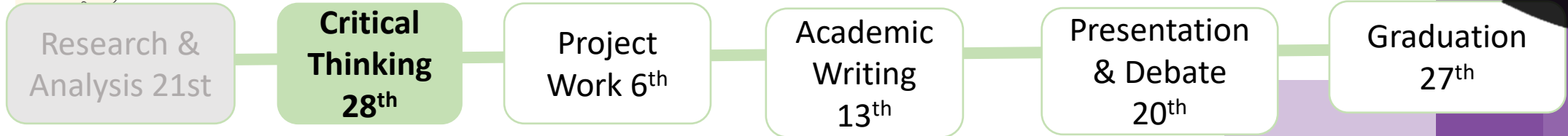
27<sup>th</sup> March

Graduation  
Event

# Sessions



- Cameras on please 😊
- 10 mins discussing Pre-session activity
- No question is silly
- An eagerness to learn, share ideas and HAVE FUN !



**Pre-Session Activity**



Link to resources for Critical Thinking session [here](#)

Look through UCL faculties and identify research that is interesting to you. Note down the

1. Faculty,
2. Division and
3. Research Topic

[Research and Analysis Padlet](#)

- Watch 10-minute Video on credible research [here](#)



# UCL Departments



Faculty of Population and Health Sciences

## Research

Our research spans the whole life course, from conception, birth and childhood to adolescence, adulthood, older age and death.



Join at [menti.com](https://menti.com) | use code 4798 7574



# UCL Division

Waiting for responses ...



Join at [menti.com](https://menti.com) | use code 4798 7574



# UCL Division

Waiting for responses ...



Join at [menti.com](https://menti.com) | use code 4798 7574



# Research Question

Waiting for responses ...





# Critical Thinking Session Outline

Understanding of **how to analyse sources to form a judgement**, the ability to **challenge your own assumptions** and take multiple perspectives on an issue, and awareness of the **difference between a fact and an opinion**

What makes a good question ?

How to form an opinion with multiple points of view ?



What makes a good question

30 mins



Forming an opinion

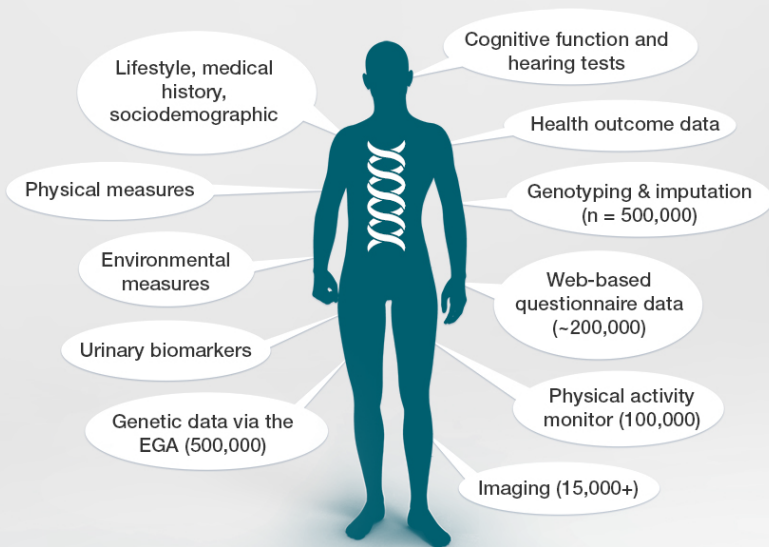
30 mins

Project focus

15 mins

# My Research

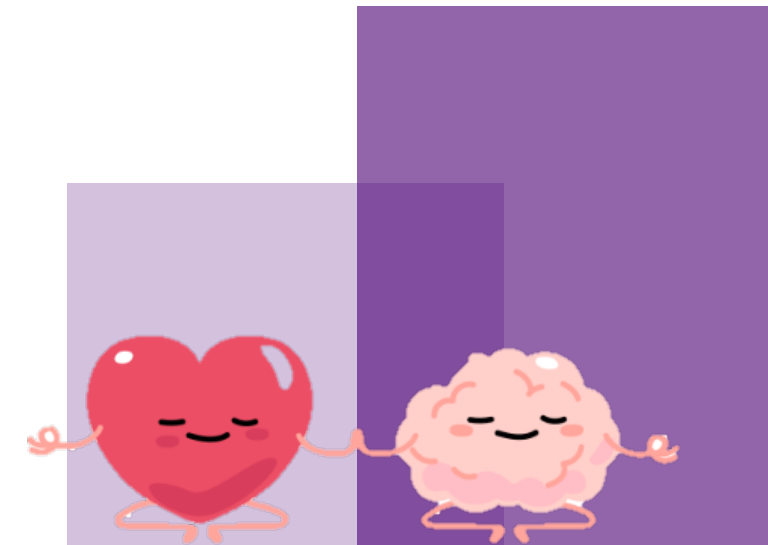
## Data on UK Biobank participants



What changes are observed ?



Second Visit



Towards a causal understanding of the longitudinal relationships between heart function and brain health

Imaging

Cognitive tests

Genetic tests

Physiology

Initial Visit

# My Research

What data is available right now?



- Imaging
- Genetic tests

- Cognitive tests
- Physiology

Initial Visit

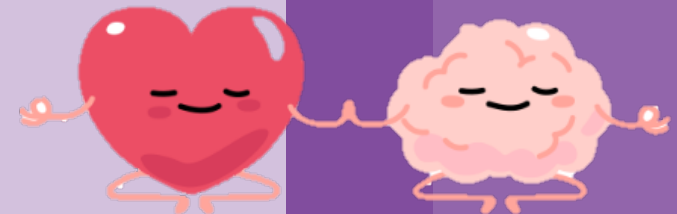


What changes are observed?

Second Visit

What questions will you ask ?

Towards a causal understanding of the longitudinal relationships between heart function and brain health



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What Questions will you ask?  
ises ...



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# What Questions will you ask?



ises ...



# My Research

What data is available right now?



Imaging

Cognitive tests

Genetic tests

Physiology

I haven't looked at cognitive and more complex genetic analysis yet ?

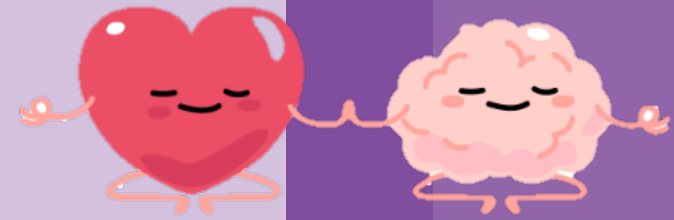
**Initial Visit**



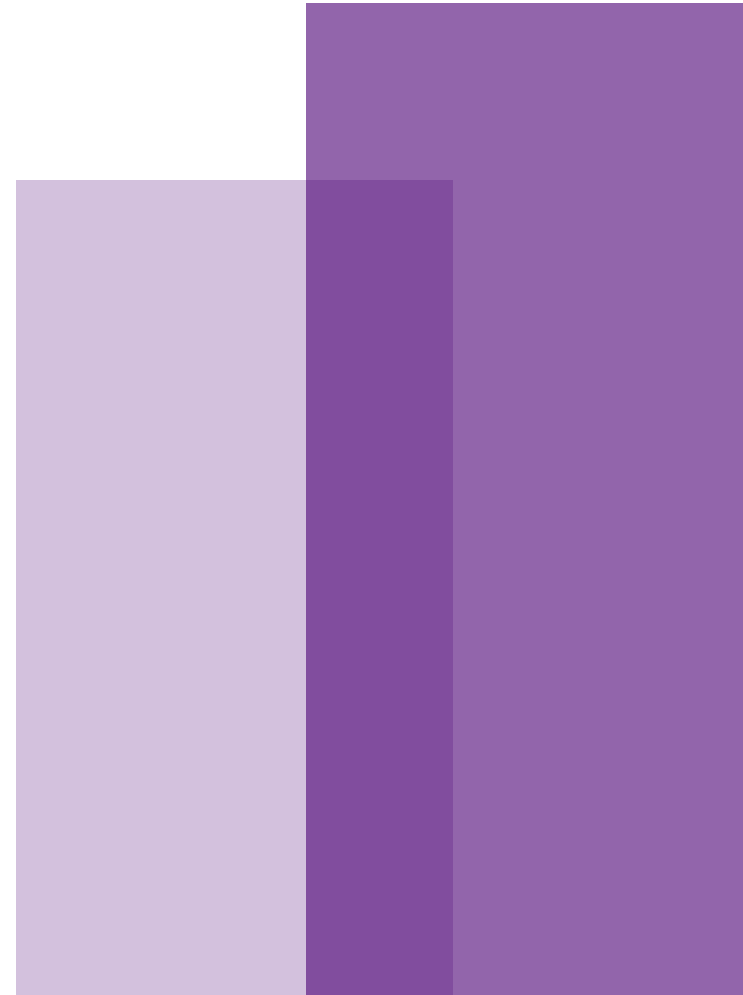
**Second Visit**

*There is more data now... what are the potential differences?  
Could I do this in a different population?  
Have I found something interesting I didn't expect ?*

**Towards a causal understanding of the longitudinal relationships between heart function and brain health**



# What questions do you want to ask ?



**10 mins**





# Session 2

How to form an opinion with multiple points of view?



What makes a good question

30 mins



Forming an opinion

30 mins



Project focus

15 mins

PRESENTED BY



12

Data Literacy

**Credible Data Research**



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# What things should you look at ?

Waiting for responses ...



# Using broccoli to protect the brain

When a person has a stroke caused by a blood clot in the brain, the clot can sometimes be broken down by clot-busting drugs. However, when this happens, molecules, called free radicals, travel into the part of the brain that has been re-supplied with blood, where they can damage brain cells.

Giovani Mann and his colleagues at King's College London BHF Centre of Research Excellence, have been studying a molecule called sulforaphane, which is found in broccoli, to find out if it can be used to limit the harmful effects of these free radicals.

Read the full article [here](#)

1. What can we find by searching 'using broccoli to protect the brain' ?
2. What type of pages post this information ?
3. Can you identify 'credible sources' ? – name the webpage and why you think it's credible?
4. Have you found unreliable sources? – what information was lacking ?
5. How do you think this information could be interpreted wrongly?

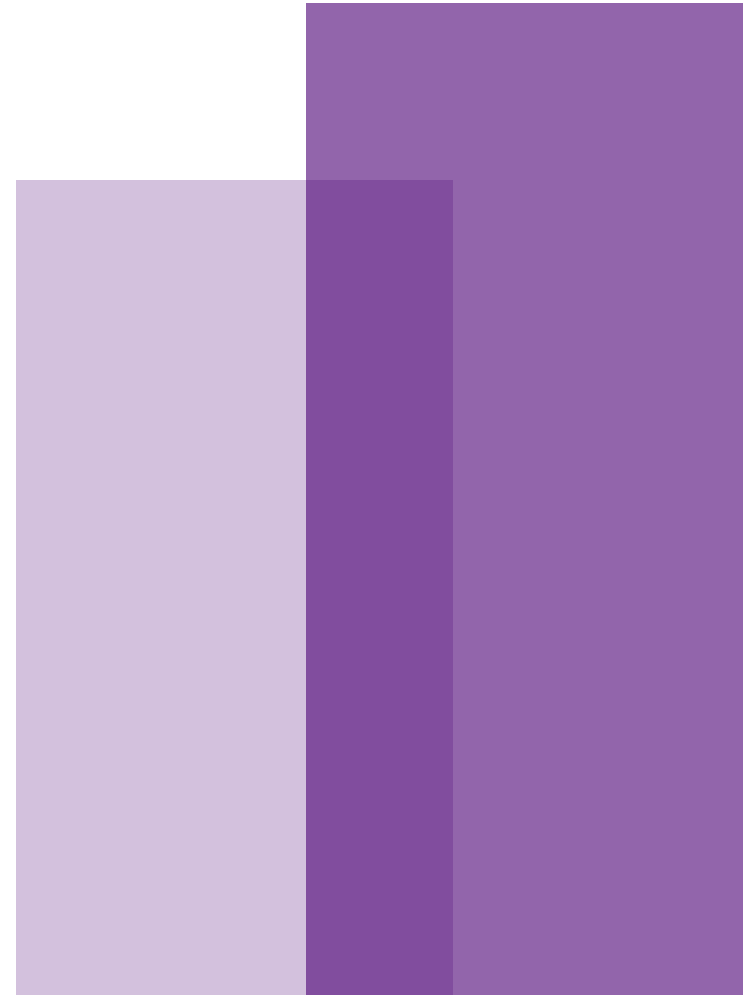
## Using broccoli to protect the brain

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# What questions do you want to ask ?



# Conclusions



Understanding **of how to analyse sources to form a judgement**, the ability to **challenge your own assumptions** and take multiple perspectives on an issue, and awareness of the **difference between a fact and an opinion**

- Coming up with a good question involves looking at what has already been done and finding gaps.
- Looking at papers and different opinions gives a holistic overview on a subject or topic .
- Collaborating on research gets the best ideas and solutions to problems.
- Science headlines can quickly be used to spread misinformation



- Pre read the papers
- This session needs the most preparation ( **Estimated Time: 30 -40 mins over the two weeks**)
- A glossary is available and use drop-in session and forum for any questions before the session



# Sessions



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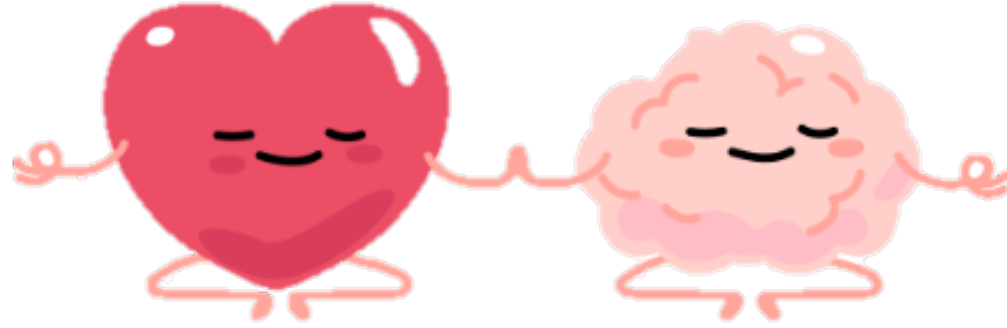


**How is a research paper structured ?**

**Pre session task**

- The common structure in original research articles
- How is the news article different from the original research article?





# See you in two weeks !

## Next steps

Complete the pre-session tasks

Next session is project work with student ambassadors

## What's coming up?

Drop-in sessions are run on the following evenings from 6pm – 7pm.

Monday 18<sup>th</sup> March

Monday 25<sup>th</sup> March

Your next subject session will be on (**Wednesday 13<sup>th</sup> March** ) from 6pm – 7:30pm.

## Any questions?

If you need any support, or have any further questions, please don't hesitate to send the UCL Expand Team an email at [wp.post16@ucl.ac.uk](mailto:wp.post16@ucl.ac.uk) or drop us a text on **07857630033**.



Ask us a question!