

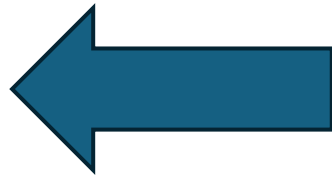
The background features four social media icons: Facebook (blue circle with white 'f'), Instagram (purple and pink gradient square with white camera outline), Twitter (blue circle with white bird), and TikTok (black square with white and pink musical note). A white brushstroke graphic is overlaid on the center, containing the text.

# SOCIAL MEDIA FOR SCIENCE COMMUNICATION

WIE Conference 2024

Rachael, Shams, Tasha and  
Charlotte

A stylized illustration of a person in a light blue shirt and dark pants, standing and looking up at the sign. The sign is supported by a black vertical post.



researchwithrachael Following Message +2 ...

33 posts 694 followers 139 following

Rachael | PhD student 🎓  
@researchwithrachael

MRC DTP PhD student at @uniofwarwick  
🔬 MBio Biomedical Science @uniofwarwick  
🕒 Circadian rhythms in the blood-brain barrier  
🗣️ Communicating science  
🔗 [linktr.ee/researchwithrachael](https://linktr.ee/researchwithrachael)

Followed by scotfa\_, mireiataus, dani\_groves + 12 more

Sporty Stuff In the lab Daily Updates Talks Why Warwic...

POSTS REELS TAGGED

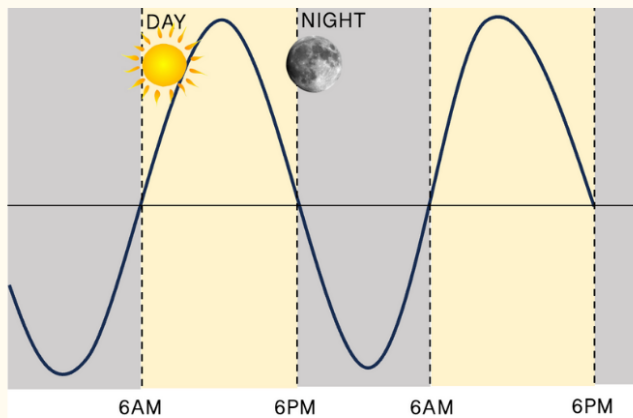
A grid of three posts from the Instagram profile. The first post is a blue graphic with the text 'Hello! Rachael here! I am a 1st year PhD student on the Interdisciplinary Biomedical Research Medical'. The second post is a video of Rachael looking through a telescope. The third post is a photo of Rachael standing next to a scientific poster titled 'Intercellular communication influencing the clock in the blood-brain barrier'.

# Using social media as an educational tool

## Circadian Rhythms & Clocks

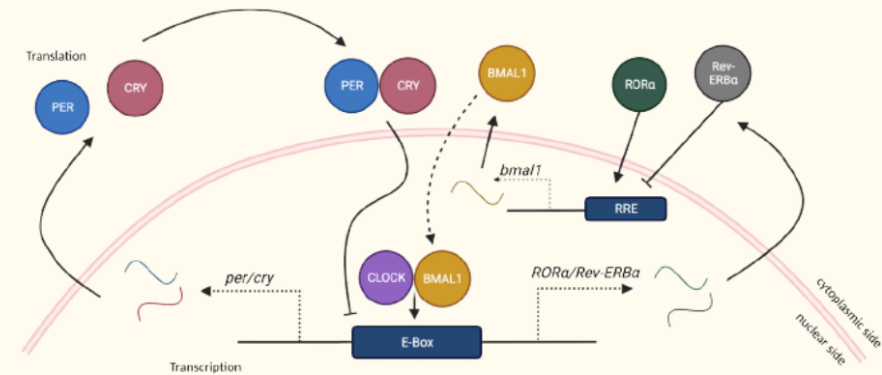
Circadian rhythms (from Latin: 'circa' = approximately; 'dies' = day) are 24-hour oscillations seen in almost all living cells in many biological processes.

They are **able to synchronise to external cues** (known as **Zeitgeber**) in a process called **entrainment**. These cues include light/dark cycles, temperature cycles and feeding patterns. Once these rhythms have been entrained, they are able to keep their 24-hour periodicity in the absence of these cues (known as **free-running**).



We entrain to light/dark cycles caused by the Earth rotating on its axis - a.k.a. day & night!

Circadian rhythms are regulated by a **molecular circadian clock**. This is made up of core clock genes that form interlocking feedback loops known as **transcriptional-translational feedback loops (TTFLs)**.

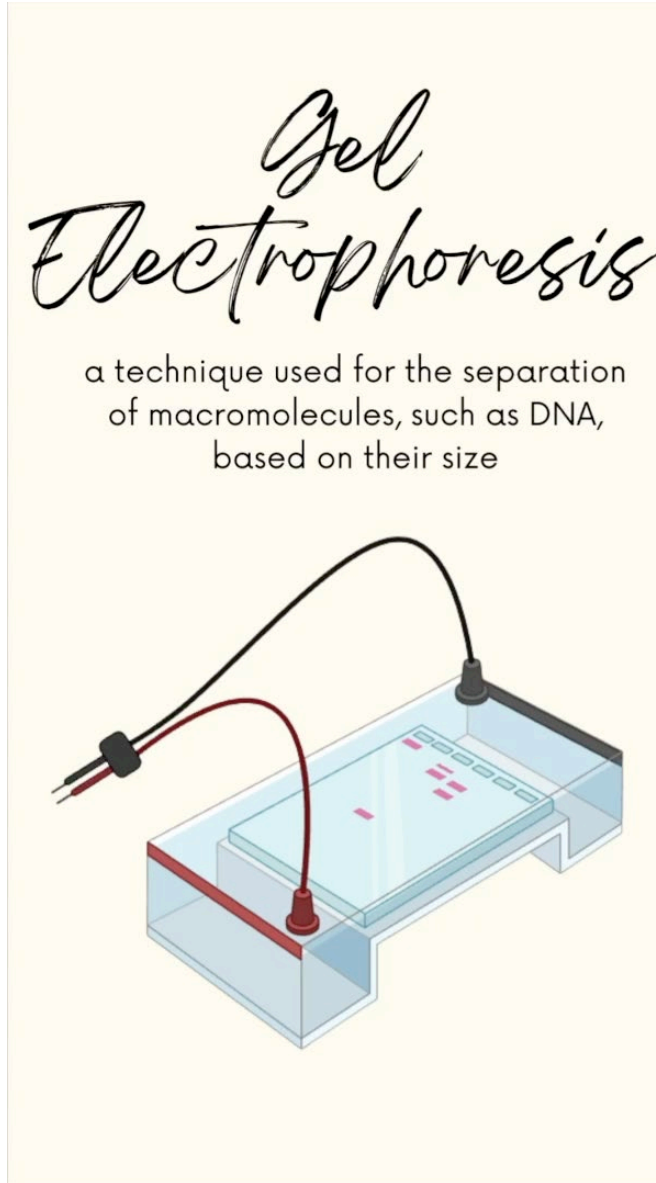
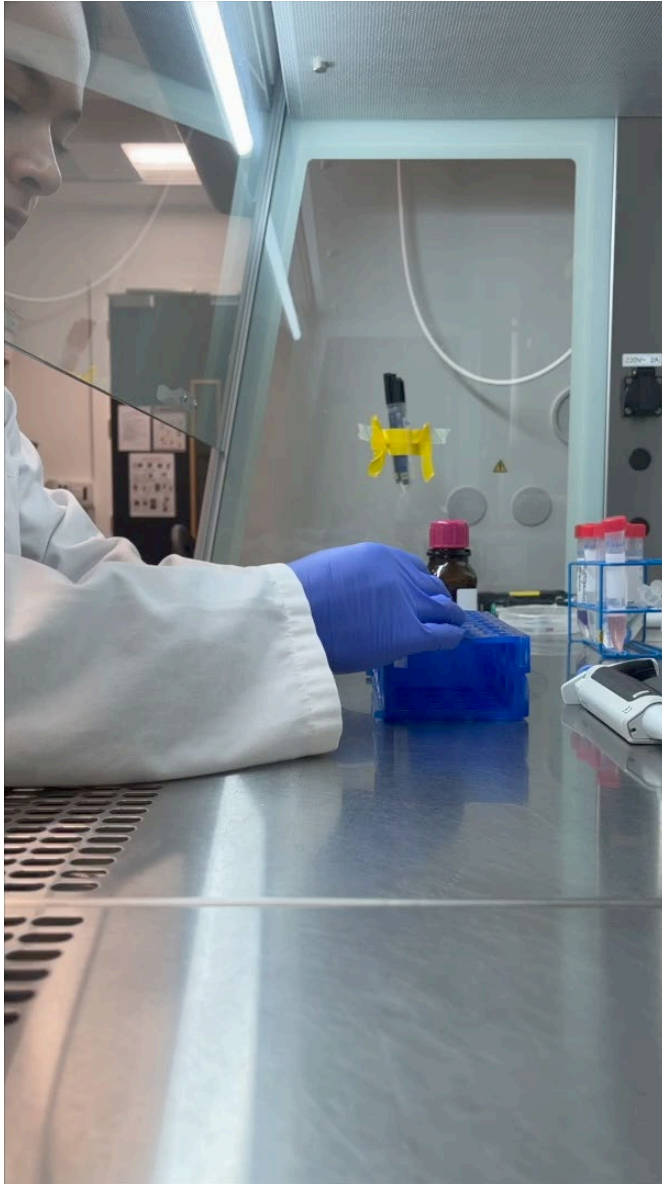


The mammalian circadian clock (and this is not the full extent of it...)

It is these circadian clocks and rhythms that allow for the daily timing of the human body. They are seen on a molecular level (e.g. melatonin secretion) all the way up to physiological levels (e.g. sleep). As so many aspects of our body are under circadian control, it is no surprise that disruption to our circadian clock can lead to disease and illness.

More to come in the future...

# Using social media as an educational tool



# #PhDTOK



**pipettegals**

Pipettegals

Follow

140 Following 759 Followers 5761 Likes

Coming for our PhD in tiktok

Videos

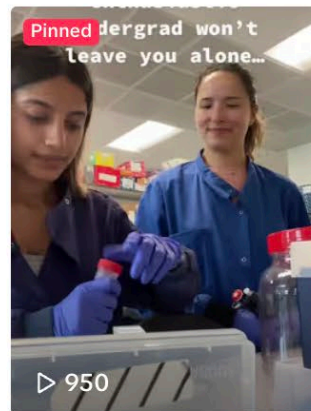
Liked



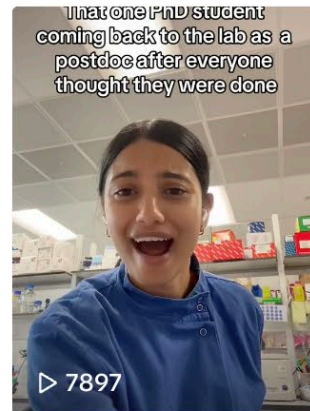
Check out our trypanos...



#fyp #science #biology...



We love you really <3 ...



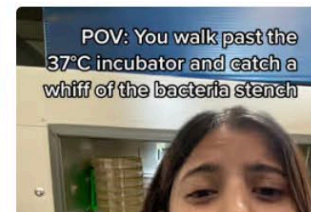
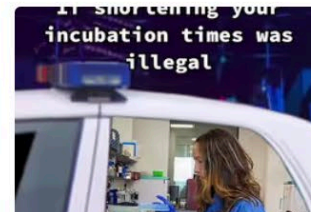
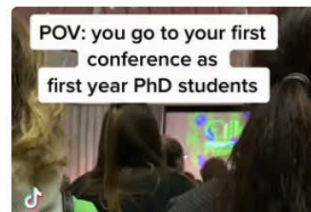
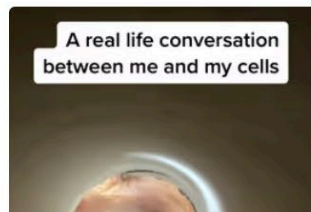
#fyp #science #biology...



How to be the most hat...




Just kidding love you fa...





# Social media to share and connect

Expansion microscopy in action




Dr. G 🌍  
Do you have a good dissociation protocol to get these cells into single cells or is that something you don't often do?  0

2023-11... Reply



 Pipettegals · Creator  
We work with trypanosomes which are single celled parasites so I don't do any dissociation :))  2

2023-11... Reply

View 1 more ▾

leen  
I lowkey don't miss wet lab life but yall are doing cool stuff! Trypanosomes yay!  3

2023-12... Reply

 Pipettegals · Creator  
Yess it's been super fun doing the expansion microscopy and working with tryps in general. What do you work on?  0

2023-12... Reply

Hide ^

Dr. Debbie Gale Mitchell  
Woah so cool!  1  
2023-11... Reply

Tasha and smolwolf  
I love this  1  
2023-11... Reply

# Social media to laugh and relate

First conference!



Dr. G 🧑

It's okay. Totally normal 😂

2022-10... Reply



3



Pipettegals · Creator

That's reassuring ☺

2022-10... Reply



0

Hide ^

ACS Undergrad

That's pretty standard. Ask lirs of questions!

2022-10... Reply



2

Harshav Mahendran

nice

2022-10... Reply



2

DisabilityDiary



# Social media to educate and engage

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Setting up a PCR reaction


And other fun + relatable PhD videos




# Biofilm Baddies

07:53 4G





 **Biofilm Baddies**  

 **@biofilmbaddies**




10 Following 20 Followers <sup>+1</sup> 100 Likes

[Edit profile](#) [Share profile](#) 


We are Phoebe, Tasha & Charlotte, PhD students at the University of Warwick 🇬🇧




   

**Drafts: 1**  
-> Birmingham


  

**Muted**



Home Shop   

07:52 4G




 **Biofilm Baddies**

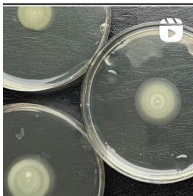


17 posts 98 followers 50 following

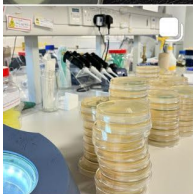
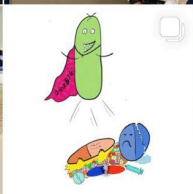
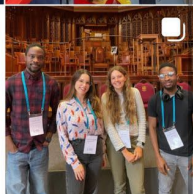
**Biofilm Baddies**  
😄 Hi, we are Phoebe, Tasha & Charlotte, PhD students at the University of Warwick  
🇬🇧 Welcome to the world of bacteria and biofilms  
[www.tiktok.com/@biofilmbaddies?t=8blO...](http://www.tiktok.com/@biofilmbaddies?t=8blO...)




**Professional dashboard**  
New tools are now available.

[Edit profile](#) [Share profile](#)





  

**Bacteria**

Home    

# Using social media to document our PhD journey

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Conference days



# Using social media to document our PhD journey

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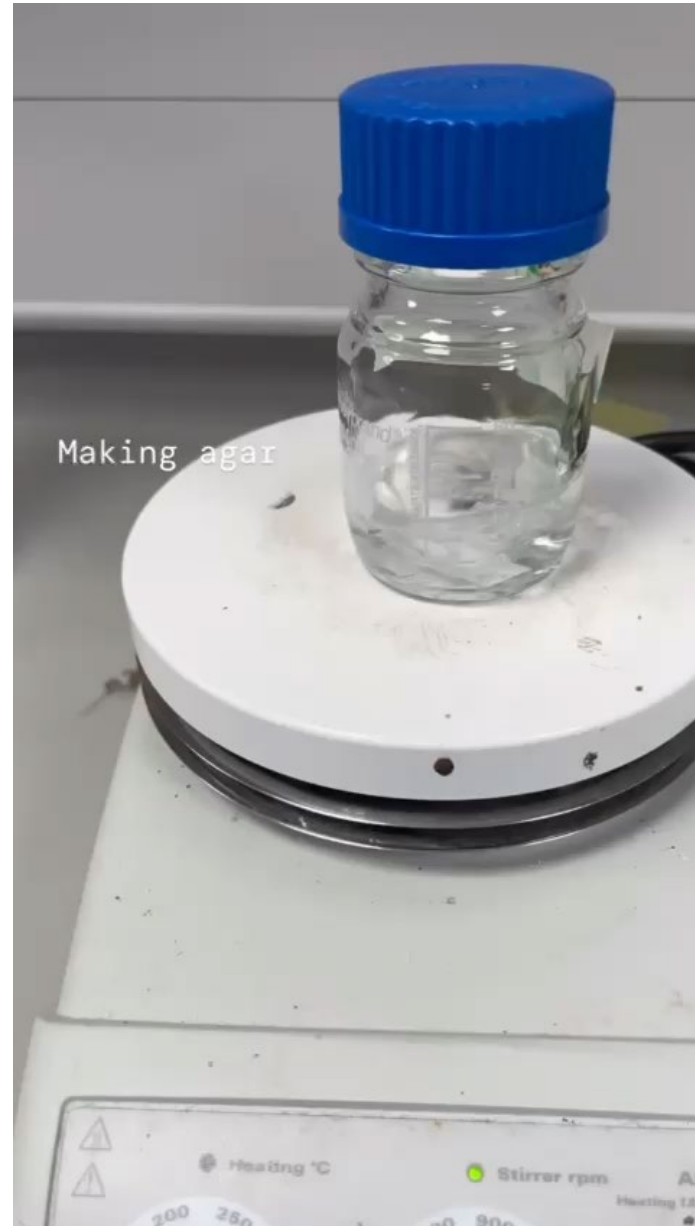
Making viral memes PhD  
relatable



# Using social media to document our PhD journey

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## Bacterial Swimming Assay

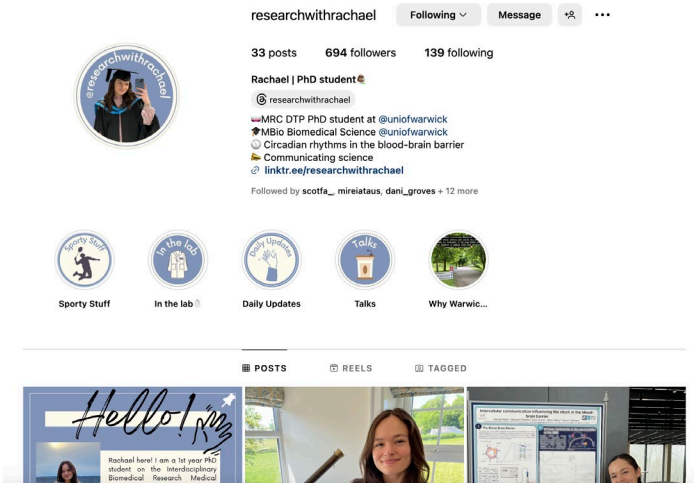


# Thank you for listening!

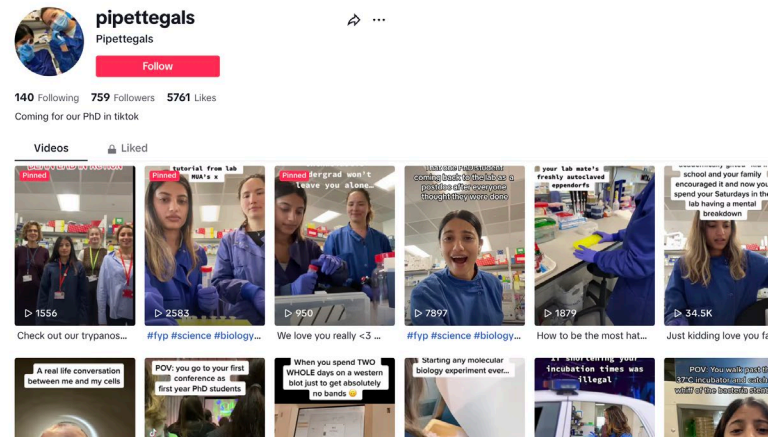
## Acknowledgements

- Danielle Groves
- Saskia Bakker

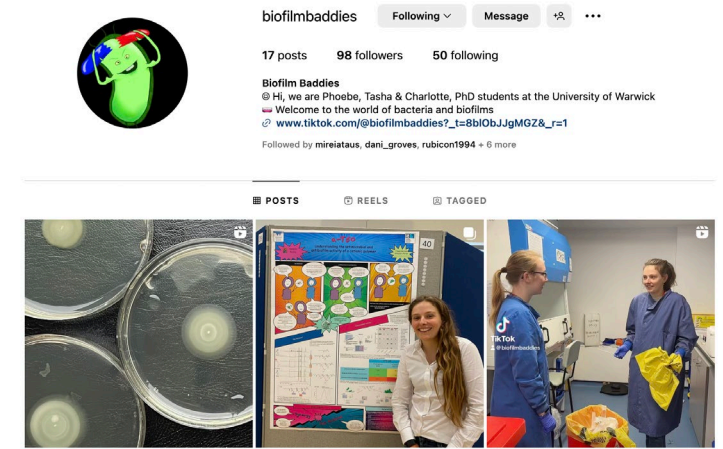
## Find us on:



@researchwithrachael  
Rachael Ralph  
On Instagram and  
@raurachael on X



@pipettegals  
Danielle Groves  
Shams Neupane  
On Tiktok



@biofilmbaddies  
Tasha Reddy  
Phoebe Do Carmo Silva  
Charlotte Cornbill  
On tiktok, Instagram and X