BBSRC DTP Induction 2024

Welcome to the Nottingham BBSRC DTP. Within this document you will find details of your induction programme, how to sign up for training (where options are available to you) and everything else you should need. For any other queries, please contact bbdtp@nottingham.ac.uk

Social Media

For those of you who use social media, please see links to our pages and a private group that has been set up for your cohort to get to know each other a bit better before you start the programme.

Follow us on Twitter
Like our Facebook Page
Join your Facebook Group – Nottingham DTP 3 – Cohort 5 – 2024
Subscribe to our YouTube channel
Follow us on LinkedIn
Follow us on Instagram

WhatsApp

A member of the cohort often creates a cohort WhatsApp group. Feel free to organise this in the Facebook group.

Inkpath

Please note you will register for our training management platform Inkpath during the training session on 25th September 2024. This will show you the induction training schedule and training options available to you. You will need to book on all of these training modules by 10am 26th September 2024.

Map

https://www.nottingham.ac.uk/sharedresources/documents/mapuniversitypark.pdf

Induction Schedule

Your induction is split across three weeks. Please see table below for more information.
All mandatory training is **green.** Training where a selection is required between multiple choices is colour coded in the same colour. For example, you can either choose Introduction to R or Machine learning for Biology Analysis and Discovery within the Bioinformatics training options. These are both colour coded **grey**. Optional sessions/events are **yellow.** The notes section will also detail the options available to you. There is also an element of self-study training which you are free to complete at any point over the induction period.

Please note, you must sign up for all training by 9am 26th September 2024 to allow us to send you invites for training.

Key

Colour	**Training**	**Information**
Green	General Mandatory training	Please complete all training in green
Orange	Partner visits	Please choose at least one partner visit.
Blue	Molecular Biology	Students with previous molecular biology lab skills experience to sign up for q-RT-PCR training. Students with no prior or limited experience to sign up for Basic Molecular Biology Lab Skills. You will be required to attend both parts of these training sessions
Grey	Bioinformatics training	Students with no prior or minimal bioinformatics experience to sign up for Introduction to R. Students with prior bioinformatics experience to sign up for Machine Learning for Biology Analysis and Discovery.
Yellow	Optional	This training is optional.

Welcome week (Week 1)

Induction day 24th September 2024

Social Sciences & Arts Graduate Centre, Highfield House, University Park, NG7 2RD (enter Highfield House building through double doors, take stairs up to your left).

Time	Induction day with DTP Team	Session Leads
10:00-10.15	Registration & Coffee	
10.15-10.45	**Welcome to the BBSRC Doctoral Training Programme** (DTP) Meet the DTP Team	Zoe Wilson, Sara Goodacre & Mark Christian (NTU)
10.45-11.00	Ice breaker	Sarah Buckley
11.00-11.45	**The DTP Programme** Find out more about the structure of the programme, including the training programme and induction.	Clare Barton & Mandy Gill
11.45-12.15	**Welfare Presentation**	Rachel Walker
12.15-13.00	Lunch	
13:00-13:45	**Current student presentations**	Clare Barton
13.45-14.15	**Peer Mentor information session**	Rachel Walker
14.15-14:45	**DTP Quiz**	Mandy Gill

Induction training

Date	Time	Training	Session Leads	Online/in person	Notes
25th September 2024	10.00-11.00	**Inkpath induction** **Join the meeting now** Meeting ID: 382 216 333 543 Passcode: fA5dtj	Marc Evans & Mandy Gill		Online *Please bring your mobile phone to this session.
25th September 2024	11.30-12.00	**Health & Safety Training** **Join the meeting now** Meeting ID: 350 958 756 410 Passcode: MyGDzW	Sarah Watson		Online
25th September 2024	14.00-15.30	**Development Needs Analysis**	Clare Barton	In person	B46 Trent Building
26th September 2024	11.00-12:00	**Transition to PhD study** **Join the meeting now** Meeting ID: 360 774 243 304 Passcode: 92CdRo	Sandra Rose, Alice Haslam, Sara Goodacre	Online	
27th September 2024	10.00-14.00	**Crystal Maze (including lunch)**	Off limits Events	In person	The West Event Space, University Park (outdoor space) Nearest building & bathroom access Humanities **Lunch 1-2pm** **C17 Monica Partridge Building** *Please wear appropriate outdoor clothing. *MG will send Inkpath code

Induction Training Week 1

Date	Time	Training	Session Leads	Online/In person	Notes
30th September 2024	09.00-11.00	Introduction to Imaging facilities	Tim Self, Robert Markus, Seema Bagja, Denise Mclean	In person	Portland Building D37
30th September 2024	11.30-12.30	UoN Library Training	Lucy Ayre	In person	Screen Room, Hallward Library
1st October 2024	09:30-10:30	Introduction to Neurodiversity https://us02web.zoom.us/j/3781341421?pwd=WWlzQzdLZE1TTWVRZTA3cUlRWElJUT09&omn=85893185907	Nat Hawley, Exceptional Individuals LINK	Online	
1st October 2024	13:00-14:00	Biochemical & Chemical Modification of Proteins	Neil Thomas	In person	C22, Coates Building
1st October 2024	14.00-15.00	Applications of Mass Spectrometry to Biological Systems	Neil Oldham	In person	C22, Coates Building
1st October 2024	15.00-16.00	Applications of NMR to Biological Systems	Huw Williams	In person	C22, Coates Building
2nd October 2024	10.00-16.00	q-RT-PCR training **PART 1**	Mark Christian	In person Lab 131, ISTEC Building, Clifton Campus, NTU *(lunch will be provided)*	**Please choose between this training or basic molecular biology lab skills (2 sessions for each one)** Laboratory Practical: Measuring Gene Expression by Q-RT-PCR:

Date	Time	Training	Session Leads	Online/In person	Notes
					Students will extract RNA from cultured cells and prepare a reverse transcription reaction to generate cDNA. The cDNA will then be used as a template for quantitative real-time PCR for a gene of interest and a housekeeping gene. The data generated will be used to determine relative gene expression. Learning Outcomes 1) Explain how Q-RT-PCR can be used to monitor changes in mRNA expression. 2) Explain how Real Time PCR represents a significant improvement over End Point PCR methods. 3) List the key components of a

Date	Time	Training	Session Leads	Online/In person	Notes
					Reverse Transcriptase reaction. 4) Describe the precautions that can be taken to minimise PCR products from contaminating genomic DNA. 5) Calculate fold change in gene expression using the 2-DDCt method.
2nd October 2024	10.00-13.00	Basic molecular biology lab skills **PART 1**	Patrick McClure	In person C2a, MDL labs, C Floor, Medical school, QMC	**Please choose between this training or q-RT-PCR (2 sessions for each one)** These 2 sessions are designed to give less experienced students an opportunity to engage in some molecular biology practical work with additional consideration of experimental design, analysis and interpretation. They're aimed at students who

Date	Time	Training	Session Leads	Online/In person	Notes
					haven't undertaken (or had limited) BSc / Masters / other molecular biology lab projects.
3rd October 2024	10.00-15.00	q-RT-PCR training **PART 2**	Mark Christian	In person ERD 290 (T-Block). Clifton Campus, NTU *(lunch will be provided)*	**Please choose between this training or basic molecular biology lab skills (2 sessions for each one)** Laboratory Practical: Measuring Gene Expression by Q-RT-PCR: Students will extract RNA from cultured cells and prepare a reverse transcription reaction to generate cDNA. The cDNA will then be used as a template for quantitative real-time PCR for a gene of interest and a housekeeping gene. The data generated will be used to determine relative gene expression.

Date	Time	Training	Session Leads	Online/In person	Notes
					Learning Outcomes 1) Explain how Q-RT-PCR can be used to monitor changes in mRNA expression. 2) Explain how Real Time PCR represents a significant improvement over End Point PCR methods. 3) List the key components of a Reverse Transcriptase reaction. 4) Describe the precautions that can be taken to minimise PCR products from contaminating genomic DNA. 5) Calculate fold change in gene expression using the 2-DDCt method.
3rd October 2024	13:00-16:00	Basic molecular biology lab skills **PART 2**	Patrick McClure	In person C99, MDL labs, C Floor,	**Please choose between this training or q-RT-**

Date	Time	Training	Session Leads	Online/In person	Notes
				Medical school, QMC	**PCR (2 sessions for each one)** These 2 sessions are designed to give less experienced students an opportunity to engage in some molecular biology practical work with additional consideration of experimental design, analysis and interpretation. They're aimed at students who haven't undertaken (or had limited) BSc / Masters / other molecular biology lab projects.
4th October 2024	09.00-12.00	Introduction to R **Join the meeting now** Meeting ID: 354 595 770 749 Passcode: 5jFprq	Ben Dickins	Online	Introductory bioinformatics training Choose between this or Machine Learning for Biology Analysis and Discovery *Please note you will need your laptop for this session

Date	Time	Training	Session Leads	Online/In person	Notes
4th October 2024	10.00-11.00	Introduction to Machine Learning for Biology Analysis & Discovery **Join the meeting now** Meeting ID: 377 946 658 532 Passcode: zTx89A	NTU	Online	Advanced Bioinformatics training Students with prior bioinformatics experience to sign up for this session. Students with no prior or minimal prior bioinformatics experience to sign up for Introduction to R. *Please note you will need your laptop for this session
4th October 2024	13.00-14.00	Resilience Training **Join the meeting now** Meeting ID: 384 317 396 364 Passcode: 7SNrkj	Mustafa Sarkar	Online	Still not confirmed
4th October 2024	14.30-15.30	Pre-work for poster training on 11th October	n/a	Online	You will be in preassigned groups for this session (Teams invites will be sent to your email). Please ensure you have done the self-study before

Date	Time	Training	Session Leads	Online/In person	Notes
					this session (sections 1-4 on Moodle). You will need to self-register to access this. Section 5 will become available by this session and you work through this together as a group. https://moodle.nottingham.ac.uk/course/view.php?id=150163

Induction Training Week 2

Date	Time	Training	Session Leads	Online/In person	Notes
7th October 2024	11.00-12.30	Electron microscopy in the Nanoscale and Microscale Research Centre	Christopher Parmenter & Michael Fay	In person	C01 Engineering Science Learning Centre
8th October 2024	09:30-12:00	Allyship training **Join the meeting now** Meeting ID: 369 250 148 935 Passcode: REb8rH	Sheila Kanani	Online	
8th October 2024	13:00-14:00	NTU Library Training **Join the meeting now** Meeting ID: 316 657 249 233 Passcode: jrfmtr	Victoria Boskett	Online	Please note, you only need to attend this training if you have/are due to have a project or supervisor at NTU.
8th October 2024	14:30-15:30	Poster training **Join the meeting now** Meeting ID: 386 030 040 865 Passcode: bpqX4D	Andrew Rowe	Online	
9th October 2024	10:00-15:45	Good Research Practice: Engagement & Ethics, Responsible Research, and Inclusive Innovation (including lunch)	Michelle Hudson-Shore and Kate Millar	In person	C01 Engineering Science Learning Centre
10th & 11th October 2024	**overnight trip** (Approximate departure time UoN 9am 10th,	NIAB EMR Tour (Partner visit) https://www.emr.ac.uk/	Louisa Robinson Boyer	In person	15 total *Please choose 1 partner visit only *Please wear appropriate outdoor clothing

Date	Time	Training	Session Leads	Online/In person	Notes
	return time UoN 5pm 11th)				
10th October 2024	08:30-19:30 (approximate timings) **(day trip)**	CPI Tour (Partner visit) https://www.uk-cpi.com/	Yvonne Armitage	In person	20 total *Please choose 1 partner visit only *Please wear appropriate outdoor clothing
10th October 2024	10.30-14.30 **(day trip)**	NTU Tour (Partner visit) https://www.ntu.ac.uk/about-us/campuses/clifton-campus	Sarah Buckley	In person	35 total *Please choose 1 partner visit only. *This tour is open to all students but also recommended for students who have a lab rotation at NTU. *We recommend the Hopper Bus from UoN to travel to this visit.
10th October 2024	07.45-18:00 (approximate timings) **(day trip)**	Visit to Research Complex at Harwell & Diamond Light Source (Partner visit) https://www.diamond.ac.uk/Home.html	Amy Griffin, Dave Scott, David Price	In person	24 total inc. staff *Please choose 1 partner visit only. *Please bring Photo ID to this trip *Please wear appropriate outdoor clothing

Self-study training

Self Study Training
Poster training pre-work (Please register for Moodle site (you will need a UoN email address for this). Please work through sections 1-4 prior to your group session on **4th October.** Section 5 will be released on **4th October** and you work through this as a group. Please ensure you have completed registration and use a UoN email address to access this link. https://moodle.nottingham.ac.uk/course/view.php?id=150163