

POSTGRADUATE RESEARCH SERVICE

TRAINING PATHWAY SPECIFICATION

Pathway name	Course code (where applicable)	Year
Norwich Research Park (NRP) Bioscience Doctoral Training Partnership (DTP)		2019

NOTE: Whilst the University will make every effort to offer the training pathway as detailed, changes may sometimes have to be made for reasons outside the University's control (e.g. illness of a member of staff) or because of sabbatical leave.

TP1 TRAINING PATHWAY SUMMARY			
TP1.1	a	SCHOOL(S) OF STUDY	BIO, CHE, CMP, ENV, MTH, MED, PHA
	b	FACULTY or FACULTIES	FMH, NBI and SCI
	c	NAME OF TRAINING PATHWAY LEAD	NRPDTP Director (Prof Dave Evans, JIC)
TP1.2 <i>Note 1</i>	a	PATHWAY TITLE	NRPDTP
	b	COURSE CODE (where applicable)	
	c	FULL/PART-TIME (please specify)	FT/PT
	d	LOCATION (UEA Norwich, Distance Learning)	NBI and UEA, Norwich
	e	AVAILABLE FROM (date)	October 2019
TP1.3	EXTERNAL INPUT (please list here the input from external organisations e.g. employers, partner institutions into the development of this pathway)		
	None		
TP1.4	FURTHER INFORMATION (web link to further information)	https://biodtp.norwichresearchpark.ac.uk/	
TP1.5	AVAILABILITY BY AWARD (please tick all that apply)		
	Masters Degrees by Research	<input type="checkbox"/>	Master of Philosophy
	PhD (3-year)	<input type="checkbox"/>	PhD (4-year) ✓
	PhD by Publication	<input type="checkbox"/>	Doctorate in Clinical Psychology
	Doctor of Education / Master of Education	<input type="checkbox"/>	Doctor of Medicine
TP1.6	MANDATORY ELEMENTS OF TRAINING		
	There are a substantial number of mandatory training elements incorporated into the NRPDTP Pathway. In the interest of timeliness, many of these are made available in the first few weeks and months of a studentship. Training in the following is mandatory:		

Health and Safety
 Mental Health Awareness
 Bullying and Harassment
 Equality and Diversity
 Information Security
 Research Ethics, Integrity & Regulations
 Quality Assurance & Intellectual Property
 Computer Orientation
 Training Needs Analyses and Personal Development Plans
 Endnote
 Introduction to 'R'
 Basic Statistics and Design Principles with 'R'
 Progress Reporting
 Writing Your Thesis

The following NRPDTP-specific events are mandatory:

- Cohort training (four sessions of half a day in first year, a minimum of one half day per year thereafter);
- Masterclasses (half a day in each of the first three years; current topics – Public Engagement (PE), Knowledge Exchange and Commercialisation (KEC), Exploiting New Ways of Working (ENWW));
- Computational and Systems Biology (a minimum of four and maximum of eight whole days in the first or second years depending on existing experience);
- Summer Conference (one whole day)
- EITHER a Professional Internship for Postgraduate Students (PIPS; three-month placement unrelated to the PhD research in an external organisation in any sector of employment) for students not working with industrial partners and
- PIPS development training (three courses; total two days);
- OR a specified industrial placement (CASE; minimum 3 months, maximum 18 months).

TP2 PATHWAY LEARNING OBJECTIVES

TP2.1 Learning Objectives

This pathway is based on the requirements set out in the Vitae Researcher Development Framework (RDF; <https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-framework-rdf-vitae.pdf/view>), UKRI 'Statement of Expectations for Postgraduate Training' (<https://www.ukri.org/files/legacy/skills/statementofexpectation-revisedseptember2016v2-pdf/>) and the NRPDTP Portfolio Agreement with the BBSRC. The Vitae framework is divided into four domains that encompass:

A Knowledge and intellectual abilities – the knowledge needed to do research

B Personal effectiveness – the qualities needed to be an effective researcher

C Research governance and organisation – the professionalism required

D Engagement, influence and impact – the skills needed to work with others and contribute to the wider environment

Training elements must be taken to cover each of these learning domains to obtain a minimum of 30 days of training including the mandatory training. The focus of many of the essential learning objectives will be to support research leading to the successful award of an excellent thesis. However, it is also

important for students to recognise the transferability of these skills into other domains of work as required by UKRI. Furthermore, it is also desirable that they engage with additional activities that may or may not directly support their research, but would benefit their potential career destination(s). These include the cohort training, Masterclasses and PIPS or CASE placements.

TP2.2 How will these learning objectives be reviewed?

Each student's learning and development will be reviewed on a regular basis through their School's existing monitoring procedures. A full-time student has formal meetings with their supervisory team at least every four months. In addition, each student is expected to update their training record regularly. Monitoring and training records are held electronically either on the NBI Student Record (for NBI-resident students) or on the Student Information and Training System (SITS) for UEA-resident students. Attendance at scheduled events is monitored and normally entered automatically onto student records, and additional activities can be entered manually by either the student or a Learning and Development/Training Coordinator. Each student is expected to reflect on their Training Needs Analysis and subsequent Personal Development Plan (see section 3.2) prior to each review meeting and time is also allocated to this during first year cohort meetings. The benefit of previous learning activities and the need for additional activities must be discussed at these meetings, particularly at the main reviews in each year, which incorporate the probation assessment in the first year. The discussion at the main reviews is formally recorded on the main review form that is entered onto the student's database entry. The mandatory PIPS or CASE placement is reviewed at the end of the placement and a formal report written by the student and reviewed by the DTP.

TP2.3 Training Structure

A substantial amount of the mandatory training occurs during the induction in the first few weeks of the studentship because core skills are required right from the start (for example, see section 1.6, NBI PhD Pathway). The other mandatory training elements are covered mainly in the following two years, including the PIPS/CASE placements.

Other training elements, whether they are highly recommended for all students or optional, tend to be taken up throughout the second and third years. This enables a more even spread of training and development activities throughout years one, two and three. The activities in the second and third years tend to relate to the more transferable skills (including outreach, teaching, management training and enterprise competitions, for example).

The fourth and final year learning and development activities tend to focus more on completing the thesis, preparing for the viva, and gaining skills more directly related to the next likely career destination(s) of a given student (e.g. preparing for interviews and career-specific workshops).

DTP-specific mandatory training is provided or procured by the DTP; the remaining mandatory training is delivered or procured by the NBI Learning and Development team or UEA SCI and FMH Faculties via their Schools. Additional training is also provided by both NBI and UEA and is documented in the NBI PGR Development Programme brochure that is made available to students and online at <https://www.uea.ac.uk/study/postgraduate/research-degrees/personal-and-professional-development> for those courses available through UEA.

TP3 PATHWAY COHERENCE AND EMPLOYABILITY

TP3.1 Learning Progression

How will progression in terms of skills, knowledge and understanding be reflected in the pathway between activities/courses in any one year and across the years as research degree candidates make progress through their course of study?

Engagement with learning and development is regularly assessed by a student's supervisory team and formally recorded annually at the main review (see section 2.2). The student is required to comment on how their training has helped their studies and personal development, and on what additional training needs have been agreed with the supervisory team. In addition, each student and their supervisor are asked to comment on their satisfaction with the personal and professional development training on offer. Following their PIPS/CASE placement, students are also asked to review their learning experience and report on it to the DTP and the funder.

The probation assessment is carried out as part of the first-year main review meeting. This involves an assessment of the progress made by the student based primarily on a written scientific report together with a broader assessment of their learning and development.

Training is also discussed at other review meetings (any agreed training needs are formally recorded) and at cohort sessions.

At the end of a studentship, each student's training record will be assessed by the supervisory team to ensure the student has engaged sufficiently with activities. This assessment will be based on a review of the electronic training record, the student's personal development plan, placements reports and the formal record of the reflections by the student on what they have gained from their training and development activities.

TP3.2 Feedback Cycle

Please explain how feedback from supervisors and others will support the coherence of the programme. How will this feedback impact on subsequent activities/courses?

Students are supported in their training and development needs throughout their studies. During the induction, they are guided by the NBI Learning and Development and UEA Training teams on how to get the most out of their Training Needs Analysis and Personal Development Plan.

Each student must draft a Training Needs Analysis and complete it with the support of their supervisory team within eight weeks of registration. The agreed form will be formally recorded on the relevant database. Students are encouraged to use a SWOT analysis to help develop their Training Needs Analysis.

Each student will then draft a Personal Development Plan, which must be completed with the support of their supervisory team at the time of their first interim review within month four.

Students can seek additional support from the NBI Learning and Development team, the NBI Graduate School Office and the University Careers Service.

Supervisors are encouraged to engage with the support of their student's training and development through various means. Whenever a new student is about to start, their supervisor must attend a briefing session with the relevant PGR Director and the NRPDTP Director. At this session, supervisors are strongly encouraged to engage fully with their student's training and development needs and the evaluation of activities already undertaken. Indeed, the recording of training needs and reflection are embedded within the formal reporting processes. Specifically, supervisors are required to comment in

the main review form whether any action needs to be taken in relation to personal and professional development and research training.

An additional review (based on the student's report) is carried out by the DTP following all placements and provides feedback to the student.

Staff who supervise students are all appraised of reviewing procedures and will use the same principles of review and feedback, coaching and challenging, and encouraging performance and development with their students, in the same way as they would members of staff.

The training teams and the postgraduate offices encourage supervisors to provide feedback on training and development opportunities for students through direct contact, the Postgraduate School Executive, and other forums such as faculty meetings and local learning and development committees.

TP3.3 Employability

How is employability embedded into the pathway?

Training for employability within academia comes from a range of formal courses offered at the Faculties including manuscript and grant writing, presentation skills, scientific, computing and advance research skills, and from the less formal 'on-the-job' training gained via the student's research experiences, including laboratory technical skills. The BBSRC DTPs, however, are specifically designed to deliver life skills training and experiences in addition to these normal academic ones obtained through studying for a PhD. Hence much of the mandatory training is geared towards these goals, for example the Masterclasses. In addition, students must undertake placements either with their studentship's industrial partner or with an organisation within any sector of employment unrelated to their research, to gain a viewpoint from outside academia. In addition, there are opportunities including a range of activities covering communication, entrepreneurship, innovation, commercialisation, and careers in general. Other opportunities also exist beyond what is listed in the brochure, including teaching activities within and beyond the University, and internships within any sector of employment, which are supported by the NBI Graduate School Office and the University Careers Service. This breadth of training and development opportunities allows a student to engage in activities that are most pertinent to their potential career destination.

Notes

1. Pathways may correspond to a particular degree programme within a School (e.g. Doctorate in Clinical Psychology) or to programmes within a particular Faculty or other Graduate School, or to cross-institutional programmes within a Doctoral Training Partnership.
2. Pathways may choose to specify learning outcomes to be achieved in individual years of the programme or to be achieved by the end of the programme.