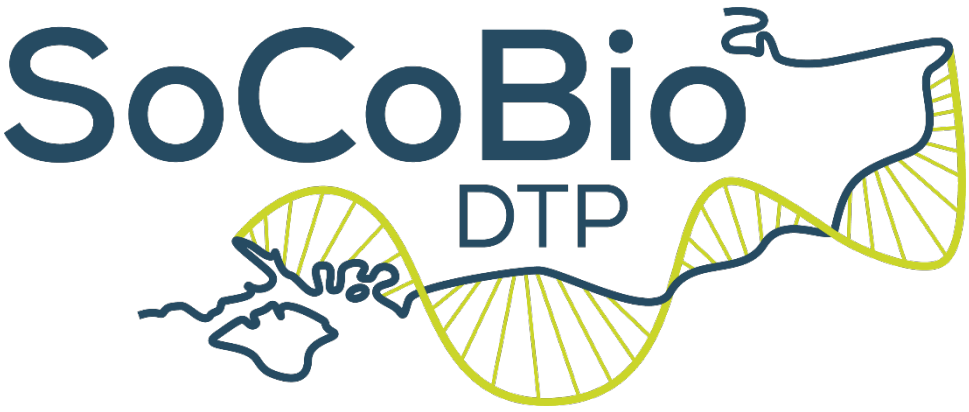
South Coast Biosciences Doctoral Training Partnership (SoCoBio DTP) Student and Supervisor Handbook 2023/2024

PLEASE READ THIS BOOKLET CAREFULLY AND RETAIN IT FOR FUTURE REFERENCE



Biotechnology and Biological Sciences Research Council

1 Contents

1 Acknowledgement/disclaimer

Every attempt has been made to ensure the accuracy of the information contained in this handbook was correct at the time of release. The handbook will be updated annually so please ensure you use the current version which will be located on the SoCoBio Microsoft Teams site.

2 Welcome from the Director of the South Coast Biosciences DTP

I would like to welcome all the new and current students and supervisors to the SoCoBio DTP. This doctoral training partnership has been designed to train students in cutting-edge biological and biotechnological research with an emphasis on giving students a strong background in data science and business awareness. In doing so we have developed many strong partnerships with industry, including the many local biotechnology industries that thrive on the south coast of the UK. I would also like to welcome our industry partners that are contributing to the funding and supervision of students as well as training and oversight of our programme. We hope that the links we forge over the lifetime of this programme will be an important legacy for SoCoBio in the future. However, our most important legacy will be the successful training of over a hundred outstanding biosciences Ph.D. students. You have been selected for your enormous potential to excel in research and your future careers and it our commitment to you that we will do everything we can to help you realise your potential. Undertaking a Ph.D. can be difficult at times, but we will be here to support you and guide you through these difficult periods so that you can enjoy the opportunity to undertake research in your chosen projects.

Professor Matthew Terry, DTP Director

3 Purpose of handbook

This handbook is to provide key information applicable to the SoCoBio DTP cohort. Please read in conjunction with your host institution's school/department PGR handbook (links below). Please make use of the resources within this handbook as they support the regulations relating to your obligations and that of your host University while you are a student. It also provides helpful information on matters such as finance, wellbeing and support facilities and training provision.

Please read the handbook right through initially and then use it for reference during your PhD. For more information, please ask your supervisor, SoCoBio DTP Director, DTP Manager and/or local administrator or local Graduate School. See section 17 for useful links

4 General Information

4.1 Studentships

The first cohort of students to this DTP started in September 2020 with core funding from BBSRC and additional funding from each of the partners. Students are recruited to either a standard/CASE studentship or Industry co-funded Studentship.

- **Standard/CASE BBSRC DTP students** complete two rotation projects within their offer theme and a 3-month professional internship (Section 9) in an organisation of their choice (standard studentships) or at their CASE partner (CASE studentships) as part of their PhD.
- **Industry co-funded BBSRC DTP students** apply directly to a research project. This project will contain a minimum of a 3-month internship/collaboration with an industrial partner connected to the PhD.

4.2 DTP Governance

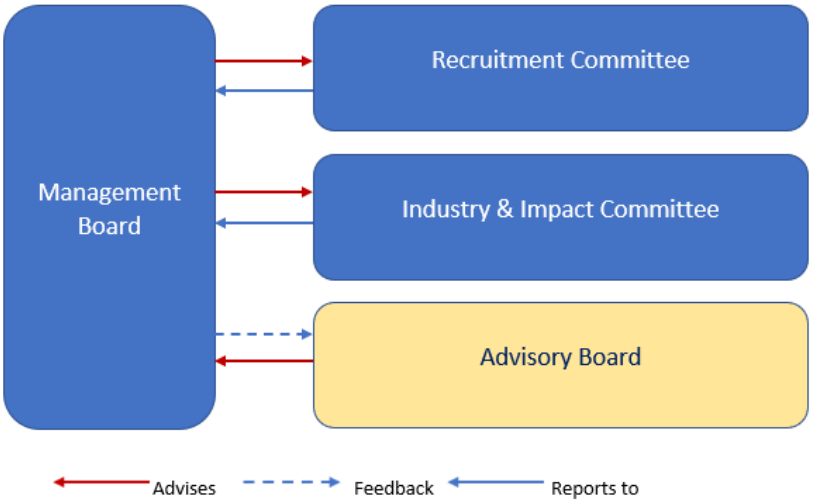
4.2.1 Responsibility of the DTP

- Recruitment
- Management of BBRSC/UKRI funding
- SoCoBio-specific training opportunities and events
- Programme development
- Co-ordination of cohort level activities and training

In addition to the support of the DTP, host institutions' Graduate Schools are responsible for the following:

- Registration
- Student examination
- Student Progression
- Disbursement of stipend and RTSG to students

4.2.2 Governance Structure



4.3 Contacts

4.3.1 Key contacts

Contact details for the Management Team are given below:

University of Southampton	DTP Director Prof Matthew Terry Overall responsibility for management of SoCoBio DTP mjt@soton.ac.uk	DTP Deputy Director Prof Rohan Lewis (Student monitoring Lead) Rohan.Lewis@soton.ac.uk	DTP Manager Sandra Dancer SoCoBio@soton.ac.uk s.dancer@soton.ac.uk
University of Kent	Senior Academic Lead (Wellbeing Lead) Dr Jenny Tullet J.A.M.Tullet@kent.ac.uk	Deputy Academic Lead Dr Becky Hall R.A.Hall@kent.ac.uk	Administrator Felicity Clifford F.Clifford-254@kent.ac.uk
University of Sussex	Senior Academic Lead (Recruitment Lead) Prof Daniel Osorio D.Osorio@sussex.ac.uk	Deputy Academic Lead Prof Frances Pearl F.Pearl@sussex.ac.uk	Administrator Amanda Britt A.D.Britt@sussex.ac.uk
University of Portsmouth	Senior Academic Lead (Cohort Training Lead) Dr Anthony Lewis Anthony.Lewis@port.ac.uk	Deputy Academic Lead Dr Binuraj Menon binuraj.menon@port.ac.uk	Direct administration enquiries to Academic Leads
NIAB at East Malling	Senior Academic Lead Dr Eleftheria Stavridou Eleftheria.stavridou@niab.com	Deputy Academic Lead Dr Matevz Papp-Rupar Matevz.Papp-Rupar@niab.com	Direct administration enquiries to Academic Leads

DTP PIPS Lead is currently vacant.

4.3.2 Enquiries

Please direct your enquiries to the DTP Manger through the central SoCoBio mailbox SoCoBio@soton.ac.uk or SoCoBio Teams Group. Refer to Key Contacts (section 4.3.1) for contact information for local Administrators and Academic Leads who can be contacted directly.

- **Administration of DTP programme enquiries:** The DTP Manager and local administrators are the key points of contact for any queries concerning administration of the DTP programme and work closely with Supervisors and the SoCoBio Operational Team to ensure the smooth running of the programme and of students' research projects and training.
- **Institutional specific enquiries:** Institutional Administrators should be contacted with any queries about institutional specific matters (e.g. annual progression or university policy), maintenance stipend or fees payments, as these are handled locally.
- **General advice and information:** Institutional Academic Leads are available to students ('open door' policy when free, email at any time, by appointment if all else fails) to provide information and advice about any aspect of the programme in the first instance.
- **Pastoral enquiries:** The DTP Manager and Administrators are also available to students in a pastoral role when required.
- **Concerns:** Students are encouraged to discuss matters of concern with their supervisors or with the DTP Management Team. Comments made through these channels will be considered by the appropriate DTP Management committee.
- **Student complaints:** Students should consult their host institutions PGR Handbook for Regulations Governing Student Complaints which set out the procedures that should be followed should you wish to raise a complaint about a matter relating to either the facilities and services provided by the University, its academic programmes, and the conduct of university staff, and which has materially affected you.

4.4 DTP research themes

The SoCoBio student projects are designed to meet key priority areas outlined in the BBSRC strategic plan and in the publication Forward Look for UK Bioscience

- **Theme 1: Understanding the rules of life**
- **Theme 2: Bioscience for sustainable agriculture and food**
- **Theme 3: Bioscience for renewable resources and clean growth**
- **Theme 4: Bioscience for an integrated understanding of health**

4.5 Cohort Identity

Cohort identity is important to the SoCoBio DTP. We want our students to feel embedded within, and supported by, a cohesive, collaborative research community. Developing close relationships with

peers is central to the spirit of partnership. Establishing and embedding the cohort will begin at the induction event and develop throughout the programme at cohort wide events such as virtual conferencing & webinar events, the annual research conference and summer schools.

Students are actively encouraged from the outset to contribute ideas about how to build a cohort identity, themes for discussion or workshops at the cohort-wide events. Further cooperation between cohorts will be achieved through peer mentoring and cascading collaboration through the different years.

4.6 Equality, Diversity and Inclusion

We are committed to upholding our Equality, Diversity and Inclusion (EDI) principles, including Equal Opportunities for all regardless of Gender Identity, Ethnicity, Disability, Religion or Belief as well as striving for Dignity at Work for all and prohibiting Bullying and Harassment. The EDI Plan and Objectives are outlined on the SoCoBio DTP website. We work to ensure that everyone in the programme has equal access to opportunities, experiences and support that enables them to reach their full potential.

There is a range of support embedded in the programme, including financial support to help with additional costs and caring responsibilities and support on wellbeing and mental health. You are encouraged to view and use the resources available at your local host institution and if you have a question about EDI or need to discuss any support or related issues you can email the programme EDI champion **Professor Majid Hafezparast** at m.hafezparast@sussex.ac.uk.

4.7 Electronic Learning and Communication

- **Formal cohort-wide communication:** will be used for promotion of training opportunities, announcements – including celebration of student successes, information and administration resources, cohort-wide advice and discussion forums will be through the SoCoBio Teams site.
- **SoCoBio DTP social media channels:** X (formally Twitter) @SoCoBio and LinkedIn SoCoBio student and alumni network group, where appropriate will be used to promote student activities and achievements to relevant audiences.

Students should post responsibly on social media sites and note that any behaviour that affects other members of the University community or members of the general public in ways which might damage the standing and reputation of the University may be subject to disciplinary action within the scope of the student's host University's Regulations Governing Student Discipline.

- **Virtual Learning Environments:** Refer to your local Graduate School for institution specific VLEs

4.8 Data Sharing

The Doctoral training programme you are undertaking includes the collaboration between the University of Southampton, the University of Sussex, the University of Kent, the University of Portsmouth and NIAB at East Malling. The programme also includes collaboration with BBSRC and

other partners. As a result, the University of Southampton, as lead partner in this consortium, may need to share information about you, which may include personal data with those partners.

Each partner in the consortium, and other collaborators mentioned above, will be data controllers for the personal data they hold as a result of their participation within the SoCoBio DTP. The University of Southampton will aim to ensure that all information stored is as accurate as possible, kept up to date; and safeguarded from unlawful disclosure. Within the constraints of the General Data Protection Regulations (GDPR), the DTP will not release information to family members, prospective employers or other universities without your consent.

Further information can be found on your registered University's data protection webpages. If you have any queries or concerns about the use of your personal data during your programme, please contact your local data protection team.

Further information about how BBSRC may share your data can be found in the UKRI Data Protection Policy and the BBSRC Data Sharing Policy.

4.9 BBSRC/UKRI documentation

Standard Terms and Conditions of Training Grant are available on the UKRI website at:

UKRI Training Grants Standard Terms and Conditions of Training Grant

UKRI training grant guidance

Use of grant proposal & training grant information addendum

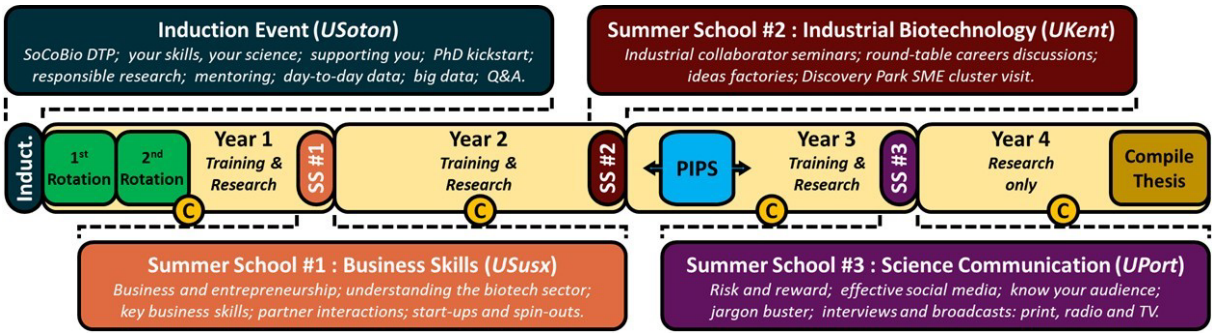
BBSRC CASE Studentship Information Pack

BBSRC frequently asked questions: CASE Studentships

5 Training Programme

The SoCoBio DTP training programme will be delivered within a highly supportive environment providing students with the skills needed to develop into future bioscience leaders. The SoCoBio's cross-institutional approach draws on the research strengths of our partners to deliver a unique, high-quality interdisciplinary and industry-facing training experience. Our training programme will equip students with high-quality professional, enterprise and transferable skills, and a world class training in bio-science disciplines spanning the four thematic areas described in section 4.4. All students will have visitor status at partner institutions to facilitate training as required.

5.1 Programme overview



Timeline of the SoCoBio PhD training programme.

The annual, cohort-wide research conference is marked as a yellow-background ©

5.2 Year-by-year training

Year 1

- **Rotations:** During the first year of standard & CASE studentships, students will undertake two 4-month rotations, usually but not exclusively at the same Institution from October –

January and from February – May. If the second rotation is at a different partner the DTP will consider financial support from the training budget to help with additional costs and caring responsibilities. For further information see section 5.4.

- **Monitoring of progress:** The DTP will monitor students' progress by viewing rotation reports and gathering feedback from students after each rotation project. For more information on rotation reports see section 5.4.3 .
- **Rotation exit questionnaires:** Accomplishment of rotation-related tasks will allow the DTP academic lead and team to monitor whether students have a sound conceptual understanding of their project, and an ability to communicate their ideas and findings in several media. Students will complete a short exit questionnaire to monitor the quality of the rotation project/supervisor interactions, and to flag up any problems. For more information see section 5.4.4.
- **PhD Project:** At the end of the second rotation, students will choose their main project (usually but not necessarily in one of the rotation labs). The summer period (June – August) will be spent starting their main lab project and usually (but dependent on the local regulations within the Institution) producing a literature survey as a basis for their thesis introduction.
- **Compulsory modules:** During the first year of studies all SoCoBio DTP students (Standard/CASE/Industry co-funded) will undertake two compulsory modules on Data Management and on Business and Entrepreneurship. Further information on these modules is in sections 5.5.1. & 5.5.2.
- **Annual Research Conference:** During the Easter break at the end of the first year we will hold a cohort-building event, the annual research conference, which students from all years will attend, and years 2-4 will present. Students will be able to raise issues confidentially with year 2-4 students who have been nominated as 'well-being champions'. There will also be a chance for students to raise any issues that concern them confidentially with the local administrator and the course team.
- **Personalised Development Plan:** A training needs and Action Plan will be completed by students to assess their strengths and weaknesses, this will be circulated to students towards the end of Year 1 once rotation students have started their final PhD project. This will inform a bespoke, Personalised Development Portfolio (PDP) developed in collaboration with their supervisory team (further details in Section 6.1). These plans will be reviewed and approved by the DTP academic lead for Training. Annually, students will reflect on their personalised plan to ensure that it continues to guide them along the most appropriate path towards their own skills development goals.
- **PIPS questionnaire:** Students will begin to plan their PIPS in their first year of the programme and are required to complete a PIPS questionnaire. For more information see Section 9.

Year 2-3

From the second year onwards progression and monitoring will follow the host institutions rules but will generally include the following:

- **M-Level modules:** During the Yr. 2 each DTP student will be recommended to study at least one M-Level module (see section 5.6), however it is also possible to undertake an M-level module in Yr. 1 if requested.
- **Monitoring system:** Students' progress will be overseen by their supervisory team. As the second supervisor, and industry supervisors for CASE and Industry co-funded studentships, will be based at another partner, these meetings may be held online.
- **Monitoring frequency:** Meetings will typically occur every 6 months, with an annual assessment that involves a written report. During meetings, any obstacles to progress will be identified, and suggestions for workarounds/interventions will be made. Students will also be signposted to sources of training, or extra support that may be needed if specific issues are encountered. If there have been issues with collection of data or lack of progress for any reason, regular reporting and meeting arrangements will be put in place to ensure the student is supported adequately.
- **Progression reports:** All students and their main supervisors must complete written progression reports (refer to host institution handbooks for templates).
- **PIPS:** During Year 3 (usually) most students will take part in their Professional Internship Placement (PIP) and work in industry or another work environment for 3 months and gain valuable experience of a placement outside academia. (refer to Section 9 for more details).
- **Presentation of PhD chapter structure:** At the end of year 3 or beginning of year 4, students will be expected to present to the Management Board their plans for the chapter structure of their thesis.
- **Annual progression review:** Following completion of the annual Progression Review process, PhD students should emerge with a concrete idea of how their research is progressing, with definite objectives for the coming year and a timetable for achieving those objectives.

Year 4

In the early stages of students' final year, they will be guided towards undertaking courses on thesis writing and on preparing for life beyond their PhD. In addition, at the annual research conference final year students will also receive training sessions in Thesis preparation.

5.3 Key dates and milestones

5.3.1 Summary of activities by year

Year 1		
Activity	**Assessment & deadline**	**Feedback**
Pre-workshop survey for Data Management Module	Complete by As stated on questionnaire	Reviewed by Data Management module lead
Monitoring	*See local host institution's progression requirements.*	
Rotation Project 1	Written Report & Exit Questionnaire Guidance in section 5.4	Project Supervisory Team

	(complete within 2 weeks of end of rotation project)	
Rotation Project 2	Written Report & Exit Questionnaire Guidance in section 5.4 *(complete within 2 weeks of end of rotation project)*	Project Supervisory Team
Data Management *(USoton)*	No formal assessment *Complete feedback questionnaire from Module lead*	Module Lead (USoton)
Summer School 1 Business and Entrepreneurship (USusx)	No formal assessment *Complete feedback questionnaire from Module lead*	Module Lead (USusx)
M-Level Modules (Optional) *(more information section 5.6)*	Formal assessment optional	Formative assessment of any submitted work
Progression Report	*See local host institution's progression requirements* *Exception will be if a student's final project is at a partner institution. Then they would switch to following the progression requirements of the new partner, which would be formalised when their registration is transferred in October of their second year of the programme.*	
Annual impact questionnaire	July	N/A
DTP Personal Development Portfolio (PDP), including Skills Matrix	July - September	reviewed by the DTP Training Lead to check that students receive adequate training, help and guidance
Year 2		
Activity	**Assessment & deadline**	**Feedback**
Business and Entrepreneurship Module *(USusx)*	No formal assessment *Complete feedback questionnaire from Module lead*	Module Lead (USusx)
M-Level Modules *(more information section 5.6)*	Formal assessment optional	Formative assessment of any submitted work
Monitoring	*See local host institution's progression requirements*	
Annual research Conference presentation (poster) on research project	March/April	Conference organisers

Annual impact questionnaire	July	N/A
Progression report	*See local host institution's progression requirements*	
Summer School 2 Industrial Biotechnology (UKent)	No formal assessment *Complete feedback questionnaire from Module lead*	Module Lead (UKent)
Review PDP	July - September	
Year 3		
Activity	**Assessment & deadline**	**Feedback**
Annual research Conference "three-minute thesis" style presentation on research project	March/April	Conference organisers
Presentation of Thesis chapter structure	July	Management Board
Annual impact questionnaire	July	N/A
Progression report	*See local host institution's progression requirements*	
Summer School 3 Science Communication Training (UPort)	No formal assessment *Complete feedback questionnaire from Module lead*	Module Lead (UPort)
Review PDP		Project Supervisor
Year 4		
Annual research Conference oral presentation (15 minutes) on research project	March/April	Conference organisers
Annual impact questionnaire	July	N/A
Submit final Thesis	End of September	Examiners

5.3.2 Calendar for 2023/24

DTP Calendar 1 October 2023 - 30 September 2024		
Date	**DTP Activity**	**Stakeholder**
02/10/2023	Standard/CASE studentships rotation #1 starts	Year 1
10/10/2023	2-Day Induction event (arrival on Monday 9 Oct PM)	Year 1

16/10/2023	Data Management Part 1 – week intensive course	Year 1
(TBC)	Industry and Impact Committee meeting #1	IIC student reps
2/11/2023	Management Board meeting 2023/24 #1	MB Student reps
14/11/2023	Advisory Board Meeting #1	For information
30th Nov annually	Second Rotation project selection deadline	Year 1
6/12/2023	Management Board meeting #2	MB Student reps
31 Jan annually	Standard/CASE studentships rotation #1 Ends	Year 1
30/1/2023	Management Board meeting #3	MB student reps
1/2/2024 - 7/2/2024	Transition week between first and second rotation project	Year 1
5/2/2024 (TBC)	Interview skills workshop for interview candidates – *current SoCoBio student volunteers welcome*	All SoCoBio students
February annually	2024 Applicant visit days – *each institution will be looking for volunteers to show applicants around labs and/or campus* UKent & NIAB - 6/2/2024 USoton - 7/2/2024 UPort - 8/2/2024 USusx - 9/2/2024	All SoCoBio Students
8/2/2024	Standard/CASE studentships rotation #2 starts	Year 1
28 Feb annually	PIPS Planning Form (F04) submission deadline	Year 2
31 March annually	IPIPS bursary competition deadline for applications	Year 2
17 – 18 April 2024	2-Day Annual Research Conference (arrival on 16th April PM)	All SoCoBio Students
24/4/2023	Management Board meeting #4	MB student reps
TBC	Industry and Impact Committee Meeting	IIC student reps
TBC	Data Management Part 2 - TBC	Year 1
31 May annually	Standard/CASE studentships rotation #2 Ends	Year 1
3/6/2023	Transition week between 2nd rotation and final PhD	Year 1

20/06/2023	Management Board Meeting #5	MB student reps
June (TBC)	3-day IB summer School at UKent	Year 2
July annually	PIPS Information Talk	Year 1
July (TBC)	3-Day Science communication summer school at UPort	Year 3
Opens July/August annually	Annual Impact Survey open, deadline for responses 29/8/2022	All SoCoBio Students
Sept (TBC)	5-day Business and Entrepreneurship Summer School at USusx,	Year 1
Sept/Oct annually	Business and Entrepreneurship Online Distance Learning (ODL) module (six weeks)	Year 1
17/9/2023	Management Board meeting #6	MB student reps

5.4 Rotations

Rotations are an opportunity for students to experience different academic environments, labs and supervisory teams as well as developing a variety of research techniques in their research area. This will enable students to select their final PhD project that best fits their emerging research interests. Usually, but not always students, select a PhD project associated with one of their two rotation projects and begin this project straight after their second rotation.

5.4.1 Rotation selection process

Students are recruited to the programme in one of the DTP research themes (see section 4.4) and choose their rotation projects within the theme offered to them for entry to SoCoBio.

- **First rotation** projects are chosen from the portfolio of projects advertised to their cohort immediately after students have been accepted to the programme.
- **Second rotation** projects are selected half-way through their first rotation project (Nov/Dec) and final PhD projects are selected towards the end of their second rotation project, using the application forms in Appendix A.
- If two students, choose the same project then the higher ranked student (according to entry rankings) would be offered the project. This process applies to final PhD project selection, however in this case supervisors would also be consulted, and the final decision would be made by the Management Board.

5.4.2 Entry ranking

Students are ranked during the recruitment process according to the following categories in equal measure.

a. Academic performance – evidenced in application, transcripts and references.
b. Experience and motivation – evidenced in personal statement and references.
c. Interview performance - evidenced through interview questions.

These rankings are only applicable during the first year of the programme for selection of projects if two candidates express interest in the same project.

5.4.3 End of rotation report

At the end of each rotation all DTP students will be required to prepare a short rotation report to be submitted to their supervisors with a copy provided to the DTP Management Board. The rotation report will not be graded, but it is a requirement to submit in order to progress. The submission deadline will be 2 weeks after the end of the rotation and supervisors will provide feedback within one month of report submission.

Format of the report will be in the form of a short journal paper with the following sections:

1. **Introduction** – this will give the background to the project and the aims of the experiments in the rotation. Figures can be included as appropriate either newly prepared or from the literature with appropriate citation. (Max 1500 words).
2. **Material and methods** – a concise description of the methods used in journal format.
3. **Results** – this section should provide a full record of the experiments undertaken. It should be appropriately presented in figures and tables with accompanying concise text.
4. **Discussion** – this should summarise the findings and put them into context of the published literature. (Max 750 words).
5. **References**

There is no overall word limit as projects may vary enormously, but students are reminded to keep their reports concise as they would need to do when writing a journal article.

5.4.4 Exit questionnaire

Exit questionnaires will be sent to both students and supervisors after each rotation. The purpose of this questionnaire is to monitor the quality of the rotation project and supervisor interactions and to flag up any problems.

5.4.5 Transition between rotation projects and/or final PhD project

All experimental work is to be completed by the end of January (rotation 1) and end of May (rotation 2) so that the first week in February (rotation 2) and June (Final PhD project) can be a transition week for students to undertake the following before they start their new project.

- Relocate to partner institution if applicable,

- focus on their end of rotation report,
- have an introductory meeting with their new supervisor,
- Undertake training: inductions, health and safety and/or other training,
- Complete administration: obtain visitor status, risk assessments.

5.5 DTP Cohort Training

During the first year of the programme students undertake training modules in **Data Management** and **Business and Entrepreneurship**. Students are expected to attend this training however it is not compulsory for the award of their degree. There is no formal assessment of these modules, but formative feedback will be given by the module leads.

5.5.1 Data management module

Software and data are the lifeblood of modern research. They are the enabling technologies behind all recent research achievements, from decoding the human genome to the discovery of the Higgs boson. Not all researchers need to become software engineers, but a good grounding in computational research skills will increase the speed and scope of your research, whilst making it more reliable, reproducible and reusable.

In our course, we take a look at some of the problems with spreadsheets and teach you how to minimise them. We teach OpenRefine: a tool that allows you to quickly understand and clean your data. We use the Bash shell to automate menial research tasks. We introduce you to version control, which keeps track of your work and makes it difficult to lose progress, and cloud computing, which allows you to efficiently scale out your computation. Finally, we introduce you to the basics of working with the programming language “R” and how to use it to manipulate and visualise data.

5.5.2 Business and Entrepreneurship module

Bioscience is a major part of modern economy, and many DTP students will follow careers working with or for Biotech and Healthcare industries. With this in mind students will take a module in business and entrepreneurship to equip them with confidence in the language and culture of business, to facilitate entrepreneurial development of their scientific endeavour, and to underpin the development of careers in bioscience-based industries.

The module will be taught by the Sussex Business School, supported by the Sussex School of Life Sciences and the DTP partners. It will use online distance learning which includes teamwork, and a Summer School. Subjects will include Entrepreneurship Theory and Practice, Managing Innovation, and New Venture Creation and Simulation. Students will develop an understanding of business functions, activities and objectives through critical application to biotech and related enterprises. The module will cover cultural, process, risk management and finance barriers directly relevant to science entrepreneurs or intrapreneurs (i.e. those applying entrepreneurial and value driven skills within larger organisations). An online exercise to design and produce a new business concept will, wherever possible apply the student’s learning to their area of research and consider how their

inherent skill sets (e.g. big data and mathematical skills) can support product or service development in a business context.

Students will attend a Summer School (see section 8.2.1) for one week on the Sussex Campus (or virtually where necessary) in July, followed by online distance learning. Students will assemble a reflective account of learning during the module into the personal development portfolio, and (probably) a certificate of completion. Enquiries to Daniel Osorio at Sussex University.

5.6 Optional M-Level Modules

SoCoBio DTP students will have access to an extensive range of bioscience-relevant Masters-level modules, to broaden their knowledge base. This is provided by all university partners. Many modules are available in an intensive, two-week format, making them more accessible for visiting students from partner institutions. International students only have access to Masters level modules at their registered University.

For each module, online training materials and assignments will be available for all registered students. Students hosted at NIAB EMR will receive financial support for travel to UKent when attendance in person is required (rather than remotely through a VLE).

Examples of what's on offer at our partners is shown in the table below: colour coding **USoton**, **UPort**, **UKent**, **USusx**

Modules supporting: *Understanding the Rules of Life*	Advances in Parasitology; Bacterial Pathogens; Biology of Ageing; Cellular and Molecular Neuroscience; Clinical Pathology; Foundations of Neuroscience 1; Fundamentals of Cancer Cell Biology; Fungi as Human Pathogens; Genome Stability, Genetic Diseases and Cancer; Genomic Stability and Cancer; Glial Development and Biology; Intelligence in Animals and Machines; Introduction to Genes and Biochemistry; Molecular and Cellular Basis of Cancer; Molecular Medicine; Molecular Recognition; Neuronal Plasticity and Gene Regulation; Neuronal Transduction and Transmission; Neuroscience; Neuroscience of Consciousness; Post Transcriptional Control of Gene Expression; Protein Form and Function; Regulating the Transcriptome; Science of Reproductive Medicine; Sensory Function and Computation; Social Neuroscience; Structure and Function in the Brain; Structure and Function of the Nervous System; Topics in Cognitive Neuroscience.
Modules supporting: *Transformative Technologies*	Advanced Computational Methods I; Advanced Analytical and Emerging Technologies in Biotechnology; Advanced Databases; Advanced Machine Learning; Advanced Methods in Molecular Research; Advanced Molecular Processing for Biotechnologists and Bioengineers; Advanced Spectroscopy and Applications; Advanced Techniques in Neuroscience; Advanced Topics in Magnetic Resonance; Applied Statistical Modelling; Bayesian Methods; Bioinformatics and Genomics; Bioinformatics & Omics; Biological Optical Imaging; Biomaterials; Bionanotechnology; Biotechnology Enterprise; Computational Biology; Computer Intensive Statistical Methods; Data Mining; Data Visualisation; Engineering Animals; Evolution of Complexity; Foundations of Artificial Intelligence; Foundations of Data Science; Foundations of Machine Learning; Functional Magnetic Resonance Imaging; Genomics and Bioinformatics; Image Processing; Industrial Biotechnology; Machine Learning Technologies; Mathematics and Computational Methods for Complex Systems; Medical Biotechnology Diagnostics; Medical Biotechnology Therapeutics; Molecular Genetics; Molecular Pharmacology; Molecular Pharmacology; NMR Spectroscopy: Theory and Application; Numerical Methods; Open Data Innovation; Practical Techniques in Cancer Cell Biology; Practical Techniques in Cell and Molecular Biology; Protein Production and CharacterisationSimulation Modelling for Computer Science; Skills in Molecular Bioscience; Statistical Computing; Statistical Genetics; Statistical Theory and Linear Models; Systems Neuroscience; X-Ray Crystallographic Techniques.

Each DTP student will be encouraged to study at least one module during the 18 months following completion of their laboratory rotations. This can be taken without the requirement to complete exams or coursework if preferred (termed auditing). Although topic choice rests with the students, they should be guided towards studying subjects that:

(i) deepen their discipline understanding or skills in a specific, relevant area; or

(ii) enhance their future career trajectory; or

(iii) further broaden their bioscience knowledge base with complementary expertise.

Details on M-Level modules at each partner and how to apply are in Appendix B. For further information contact your local administrator .

5.7 CASE and Industry co-funded Studentships

SoCoBio DTP has a number of PhD studentships which are developed as partnerships between academia and industry. These are known as Industrial CASE Studentships or CASE (Collaborative awards in science and engineering).

CASE studentships will generally focus on a problem with a direct application, which might be a commercial opportunity, a policy goal or a societal need. They provide students with additional facilities as well as a broader experience and possibly a little extra funding. They also provide the non-academic partner with assistance in researching a problem relevant to their organisation as well as access to the intellect of the student and the academic supervisor. 30% of the SoCoBio DTP studentships will be CASE.

A representative from the industry partner will be in your supervisory team and will ensure you receive the appropriate level of management, support, direction and training while working at the non-academic partner.

CASE and Industry co-funded students must take part in the compulsory modules in Year 1 and other components of the SoCoBio training programme in year 2-4.

CASE students will spend between three and eighteen months maximum with their CASE partner working on a project directly related to the student's research project. This can be taken in a one 3-month block at any point during the PhD or a number of shorter blocks giving the flexibility to plan in sync with their partner's business priorities.

The purpose of the placement is to provide a training experience unavailable at the academic institution. Training in project management, business strategy and finance, for example, should also be an integral component of the training package delivered during the placement at the non-academic partner.

CASE students funded via a CASE Studentship are not required to carry out an additional placement through the PIPS scheme, although this is still possible, with the agreement of their supervisor and CASE partner.

Guidance, advice and support are provided to the parties involved in Industrial CASE Studentships from the SoCoBio DTP Industrial Lead (contact details in section 4.3.1)

5.8 Expectations of the DTP

Students are expected to engage in both formal and informal meetings, interactions with colleagues from host partner organisations, the wider UK Bioscience research community and broader

international research community, through attendance at workshops, seminars, and conferences. The SoCoBio Management Team, Supervisors and Administrators support all SoCoBio Students in terms of researcher and personal development and endorses the UKRI Statement of Expectations for Postgraduate Training.

6 Supporting you through your studies and research

6.1 Personal Development Portfolio (PDP)

Each student will develop a PDP formed of three parts: one to ensure students develop wider skills, the second to ensure project specific training needs are identified and the third to ensure training identified is carried out and relevant to the student's needs throughout their PhD.

- **Part 1:** Skills matrix questionnaire: this is based on the Vitae Research Development Framework. Students in consultation with their supervisory team/ Graduate School and the DTP will reflect and identify areas which they would like to develop. Data collected from this will be analysed by the DTP Training lead.
- **Part 2:** Training needs and Action Plan: Students are to meet with their supervisory team to identify technical skills and training required to complete their project. This is to be summaries on a form submitted to the DTP Manager, and should include training needs identified, timeline and sign off by the primary supervisor.
- **Part 3:** Annual PDP review: Students to review their training needs and action plan with their supervisory team each year of their PhD to ensure training identified is carried out and any additional training needs identified.

The skills matrix and Training Needs Action Plan form will be issued to students in July of Year 1. The Form is to be completed by students and returned to the DTP Manager and will then be reviewed by the DTP Training Lead to check that students receive adequate training, help and guidance. It will be the student's responsibility to self-police throughout their PhD to ensure training identified is carried out.

The Management Board will monitor each student's progression data.

6.1.1 Multidisciplinary research and training opportunities

In addition to undertaking their research project under the support and guidance of their supervisory team, students are expected to actively seek to broaden their outlook and experience through taking advantage of a wide range of multidisciplinary research and training opportunities put on by their host institutions. This might include training courses in specific techniques organised locally or journal clubs. It is the responsibility of each individual student, working together with their supervisory team, to identify and arrange participation in training which is most appropriate and applicable. The SoCoBio operational team will monitor levels of engagement and it is also responsible for keeping the overall program and full range of training opportunities available under continual review as the DTP proceeds, with activities, materials, and skills needs modified as and

when required. Student engagement will be monitored at an individual level by the Advisory Committee.

6.1.2 Public engagement and outreach

There will be numerous exciting opportunities to get involved in public engagement and outreach, e.g. soapbox science, A Pint of Science, work in schools etc across the various Universities in the partnership. As part of your BBSRC funding you are required by BBSRC to undertake the following:

- **Reporting:** BBSRC require students to report on their activities and successes, how they contribute to their respective areas of research and how they engage with partner organisations and communities. Students are responsible for submitting information for monitoring and evaluation purposes on the outputs, outcomes and impacts of the research activity during and for some years after the expiry of the Studentship, through BBSRC's nominated online system - ResearchFish. Further information on reporting requirements can be found on the UKRI website.
- **Public engagement:** BBSRC require students to spend at least 2 days per year on public engagement and science communication activities, both one-way communication activities and activities which provide opportunities for two-way engagement. Students will be surveyed annually to capture this data which will be report to UKRI-BBSRC.

6.2 Mental health and wellbeing

We are passionate about our post-graduate student community, and are fully committed to ensuring our students' wellbeing, including providing extensive support to protect their mental health. We recognise students will face challenges during their PhD programme, whether related to their research or in their personal circumstances. We will be supportive of students in these circumstances and help them to maintain their overall wellbeing.

Mental health awareness will be raised at the Induction Event where students will be signposted to support available and how it can be accessed. At cohort-building events, we will provide forums for discussion of strategies to assist wellbeing and promote good mental health, including building resilience, mindfulness, and meditation. Throughout the programme students will have the opportunity to discuss their health and wellbeing at periodic meetings, progression reviews, and in year 4 during thesis preparation.

We will strive to build resilience and maintain well-being throughout a student's PhD by providing toolboxes and training packages to assist students in dealing with issues, and signposts to additional support for mental health. Students at all the partners will have access to a counselling service that can deal with graduate students. We will also be recruiting student wellbeing champions who can assist other students and give informal advice.

Links to local institutional Health and Wellbeing support are: USoton |UKent | USusx|UPort

Other resources: The Wellbeing Thesis

6.3 Annual leave & absence due to ill health or other reasons

Students are entitled to reasonable holidays in line with UKRI Training Grant Terms and Conditions inclusive of host university's closure periods and bank holidays. For part-time research students this is applicable on a pro-rata basis. Research students should seek the prior agreement of their supervisory team (in practice this will normally be the Primary Supervisor) regarding the timing of holidays and inform the DTP Manager/local Administrator.

Our expectations for DTP students are that they study throughout the whole year, for at least 35 hours per week. Students will manage their own workload and holiday time with advice from their supervisor to obtain a good balance between work and recreation. It is to be expected that laboratory work may entail more intensive and less intensive periods of work. All students should agree longer holidays with their supervisor and make sure they do not clash with any training courses. There is only one term and the dates of the term coincide with the academic year of a student's host institution.

Please refer to UKRI Training Grant Terms and Conditions for Maternity, paternity, adoption, Parental and sick leave. This document details financial entitlement and eligibility for grant extensions.

6.4 Students mainly based at a university

- **Monitoring** will conform to local rules for all student progression. There are no other additional requirements for progression however additional training/development undertaken by students will receive formative feedback. The SoCoBio Management Board will monitor the quality of the supervision and training environment across the partners.
- **Your safety** – please ensure that you have completed all necessary health and safety inductions before working in labs of accessing specialised equipment. Also ensure that you read your host institution's policies to comply with all risk assessments, access to buildings and out of hours working. Please note that due to the pandemic, institutions will have additional levels of health and safety training and monitoring in place, which may be subject to change at short notice. It will be important that you familiarise yourself with relevant sections of the website, and carefully read all communications to adjust to any changes in practice.
- **Training** - All students at a University are required to undertake mandated University-level training. For example, Health & Safety; Ethics; Equality, diversity, and inclusion; Data Management. Please refer to your host institution's PGR Student Handbook (links to PGR student handbooks are given in Section 17).
- **Facilities** – Your host institution will provide you with appropriate space to work in with core equipment and access to specialised facilities as required. Refer to your institution's PGR Student Handbook for further details (links to handbooks can be found in Section 17).

6.5 Students mainly based at NIAB at East Malling

- **Monitoring:** will conform to local rules for all student progression at your host institution. There are no other additional requirements for progression, however, additional

training/development undertaken by students will receive formative feedback. The SoCoBio Management Board will monitor the quality of the supervision and training environment across the partners.

- **Your safety:** please ensure that you have completed all necessary health and safety inductions before working in labs for accessing specialised equipment. Also ensure that you read and signed all risk assessments provided in advance by your line manager. Access to buildings and out of hours working is permitted once relevant health and safety forms have been completed in accordance with you line managers approval. Please note that due to the pandemic, NIAB EMR currently operates a rota system, which may be subject to change at short notice. It will be important that you familiarise yourself with relevant sections of the website, and carefully read all communications to adjust to any changes in practice.
- **Training:** All students based at NIAB at East Malling are required to undertake mandated University-level training provided by the University at which they are registered. Additional training will be offered on site. For example, Introduction to Bioinformatics; Statistical experimental design and periodic instruction on the use of R.
- **Facilities:** Facilities at NIAB at East Malling include: 202 ha planted with perennial and arable crops, polytunnels (2000 m2) and glasshouses (3000 m2) with environmental controls, Water Efficient Technologies (WET) Centre, GroDome (containment facility – level II-III security), Produce Quality Centre, Crop Handling Centre, a GEP-compliant efficacy trials system, fruit germplasm and plant virus collections, automated DNA sequencers, insect rearing facilities, plant tissue culture labs and taste/consumer panels. Students based at NIAB at East Malling are provided with individual laptops and access to computer facilities
- **Accommodation:** NIAB at East Malling can provide onsite accommodation for some students. Our aim is to provide onsite accommodation to all placement and first year students. However, this is subject to availability. Please contact us as soon as possible to reserve space.

6.6 Students with a non-academic (CASE) partner

For students on a project with a non-academic (CASE) partner (including industry-match funded projects) all aspects of your studies will follow those of the University in which you are registered. However, you will undertake your placement at the non-academic partner (minimum 3 months) and may work with them for longer periods depending on the research requirements of the project. For these periods you will need to follow all the health and safety rules of the non-academics, which may differ from your main Institution.

6.7 Part-time study

SoCoBio DTP supports students to undertake their PhD part-time if required. Contact the DTP Manager to discuss if you are considering part-time study.

6.8 Supervision

Our student supervision approach fosters and stimulates inter-disciplinary research activities across the SoCoBio cohorts.

- **Supervisory Teams:** Each DTP student will be guided by a supervisory team of at least two expert researchers (one designated as a Primary Supervisor and the other a Secondary Supervisor). The supervisory team will be from varying disciplines, who together span at least two partner institutions or companies, enhancing the student's training experience and promoting collaboration and a shared experience between partners.
- **Size of Supervisory Teams:** In each case, the size of the PGR supervisory team will satisfy local regulations at the institution of registration.
- **Early-career research supervisors:** will be encouraged and supported by mentors and nurtured within teams of more experienced supervisors.
- **Approachability and accessibility:** these are key ingredients for success in research for both student and supervisor, and supervisor's advice or recommendations that are given should be constructive and fair.
- **Planning deadlines:** An important part of a supervisor's responsibility is in helping students to plan deadlines, for example, in connection with the various reports that must be completed.
- **Supporting student research and development:** Supervisors will receive training (section 6.8.1) and are expected to actively support students research and development throughout their PhD by:
    - Attending the annual research conference,
    - Providing feedback to students – e.g. rotation reports, and DTP – e.g. rotation exit questionnaires, annual impact questionnaires.
    - Hosting SoCoBio DTP students from other institutions in their laboratories if there is a need for these students to acquire specific expertise.
- **Further guidance:** The responsibilities of supervisory teams can be found in local University Code of Practice for Research Candidature and supervision: USoton |UKent |USusx |UPort

6.8.1 Supervisor training provision

- **DTP supervisor training**: All supervisors of SoCoBio DTP students must attend a DTP supervisor training workshop annually.
- **Institute specific supervisory training:** All supervisors will receive formal PG supervisory training as part of their continuing professional development both at the start of the DTP training programme, and every three years thereafter, delivered by their respective Graduate Schools.
- **Mental health and wellbeing awareness ("First Aid") training:** This is compulsory for all DTP supervisors. Supervisors will undertake training in ensuring student well-being, spotting common problems, and dealing with mental health difficulties in students.

6.8.2 Information to supervisors

- **Additional benefits of DTP for students:** SoCoBio students complete their studies in the same way as other students but with the additional benefits and support of having a co-supervisor at another institution, training opportunities available through PIPS placement, studying in different labs though the first year rotations, and cohort events and workshops.
- **Student engagement in DTP activities:** As PIPS, lab, rotations and cohort events are vital parts of the SoCoBio DTP student experience and a requirement of the funding, supervisors must grant students time away from the lab to take part in these vital activities and encouraged to engage wherever possible. If circumstances arise when participation in such activities is not possible, supervisors should ensure they discuss this with their local DTP lead.
- **Supervisor monitoring:** The DTP Management Board monitor the engagement of supervisors with the SoCoBio programme and those who fail to engage will be discouraged from taking on the supervision of new SoCoBio DTP students.

6.8.3 Role of industrial partner/supervisor

- **Role of Industry partners/supervisors:** They provide a link into the sponsoring organisation, ensures the project is aligned to the business requirements and provides opportunities for training and development in the sponsor organisation.
- **Student/supervisor relationship:** Every company has a different culture and internal processes and varying levels of experience of working with post graduate projects. Students will need to be proactive with their industry supervisors, particularly in the early stages of studentship, to ensure they get access to the resources and support that they need from the company to deliver on their project plans.

6.8.4 Formal Student Supervisor meetings

- **Meeting frequency:** Students are entitled to meet with supervisors on a regular basis. Frequency guidelines are given in host institution PGR Student handbooks (see section 17: Useful links), however meetings for quick updates, advice and queries may be necessary. It is recommended that a formal meeting takes place between you and your supervisor for around 1 hour monthly. However, it is expected that informal meetings in the lab or elsewhere should take place at least once a week, or more frequently.
- **Record keeping:** Records must be kept of formal meetings (these can be prepared by the student or supervisor) and copies kept by both. Records should include date of meeting and the key points for discussion. Individual institutions may have requirements for recording meetings using online systems, and you should be aware of these.

6.8.5 Top tips for new research students

1. Discuss your expectations with your supervisor and discuss their expectations of you. Being a research student will be a very different experience to being a taught student, or working, and all supervisors work in different way.

2. Agree with your supervisor the frequency of your formal supervisory progress meetings. Not the everyday chats, but the meetings at which you will discuss your progress, the problems you have faced, and set the objectives to have reached before the next meeting.
3. Agree with your supervisor who will complete the record of your formal supervisory progress meetings, you or them. It is recommended that you do it and provide your supervisor with a copy. This will ensure no misunderstandings have occurred.
4. If you ever feel that your deadlines are slipping, speak to your supervisor immediately. It will be important to readjust the schedule and make contingency plans for how to catch up. Timely submission of your thesis is especially important.
5. Expect the unexpected. It is exceedingly rare that research runs smoothly and produces the exact results expected. Have a flexible approach.
6. Ask questions and ask for support when you need it. Never feel like you are on your own.
7. Keep your sources of information to hand, especially the host institution's Code of Practice for Research Degree Programmes. This will provide you with vital information as you progress.
8. Help us to keep spreading good practice and making improvements wherever possible. Tell us about your experiences, complete questionnaires and take part in focus groups.
9. Enjoy the ride… it is a little like a roller coaster with highs and lows, but the achievement at the end is well worth the hard work.

7 Enrolment & Registration

Registration will take place at your host institute during local inductions or online prior to inductions. Local administrators can advise on registration process for individual partners. Approximate dates when enrolment opens is listed below. Once registered you will be able to access all the facilities and services you are entitled to as a student at your host institution. When you receive your university email, please inform the DTP Manager via email: SoCoBio@soton.ac.uk so that DTP records can be updated.

- USoton enrol online from August
- UKent enrolment during induction only
- USusx enrol online from September
- UPort enrol during induction only

7.1 Visitor status at DTP partners

Students will be registered as guests at partner institutions when undertaking rotations at a DTP partner or for other DTP wide training at another DTP partner. Local administrators for each DTP partner will provide students with information on how to apply for this.

8 Events

8.1 DTP Induction

The induction event is designed to bond students into a cohesive cohort, and all SoCoBio students are expected to attend the induction event, which is held at Southampton, prior to commencing their programme. Students from across the DTP partners will have their travel and accommodation supported by the DTP during the induction period.

At the induction event students will meet with SoCoBio DTP leadership team and students from other SoCoBio cohorts and gain knowledge of the programme. See list of topics covered at the induction below.

You, Your skills, Your Science *Kick Start your PhD* *We Support You, You Support You:* *Q&A sessions* *Responsible Researcher - Research Integrity, ethics & legal/professional frameworks* *Data Management* *Cohort building activities*

8.2 Summer Schools

8.2.1 Summer School 1:

Business and Entrepreneurship (USusx): This intensive one week course will start the Business and Entrepreneurship module (see section 5.5.2) and continue to build a sense of cohort belonging. It will be taught by the Sussex Business School, Life Sciences Faculty from the DTP institutions and representatives from industry and other partners. A key focus will be on Teamwork. Students will take part in collaborative exercises to develop skills necessary for working effectively with others. Teams established here will continue to work across the DTP over the next year via the online platform. Subjects will include Entrepreneurship Theory and Practice, Managing Innovation, and New Venture Creation and Simulation, with a focus on practical examples. There will be a substantial input from the Science Policy Research Unit, which is an international leader in the field of the economics and management of science innovation, including sustainable agriculture and biotechnology.

8.2.2 Summer School 2:

Industrial Biotechnology (UKent): The University of Kent will host Summer School 2 on Industrial Biotechnology, aimed at maximising interactions between DTP students and collaborators from industry, particularly pharma and other biotechnology companies. The 3-day workshop will feature: Seminars by industrial collaborators: this will introduce students to a wide range of industrial 'hot topics'; Round table careers discussions: smaller group discussions will enable students to discuss specific topics in more detail and introduce themselves to industrial leaders; Ideas Factories: students will form teams to present proposals for start-up companies; Visit to the Discovery Park

SME cluster: Discovery Park at Sandwich (previously the major Pfizer facility) has been transformed and now hosts a group of biotechnology and other companies. The CEO of Centauri Therapeutics, Dr Mike Westby, will host DTP students and supervisors for a conference aimed at exploring the ongoing research at the site and the processes involved in starting an SME. It will feature talks by venture capital experts who have been instrumental in developing the site.

8.2.3 Summer School 3:

Science Communication Training (UPort): The third summer school will further develop student's communication skills, particularly regarding disseminating their science to stakeholders though non-expert channels. Content will include:

- ***Risk and Reward*:** Covers the pros and cons of engaging with the popular media.
- ***Effective Social Media*:** Trains students in successful dissemination of their research using, for example, X (formally Twitter) and Facebook, and how to assess social media reach and impact using data analytics, e.g. Altmetric.
- ***Jargon-Buster*:** Training in ensuring that science is accessible to the non-expert audience (e.g. policymakers, funding agencies, stakeholder partners, the media and members of the public).
- ***The 3-Minute Antithesis*:** Workshops in which students experience the challenges faced by non-specialist media interviewers, to enhance their skills in empathetic science communication. Each student is paired with a peer from a different institution whose research field is sufficiently distant from their own. Study time is provided for students to undertake one-to-one interrogative interviews with their peers and prepare their "3-minute thesis"-style presentations. These are delivered to a panel of mixed experts, who subsequently provide feedback.
- ***TV and radio interviews*:** Utilising our purpose-built studios in the School of Creative Technologies, students will experience the process being interviewed on their bioscience research and innovation. After reviewing their recorded interviews, they will self-assess their performance, and receive feedback from academics and media experts.

8.3 Annual Conference

The annual research conference will be held in March/April each year for the whole cohort. Typically, a two-day event, it provides the entire cohort with opportunities to communicate their science, exchange research ideas, and share their training experience. At the conference 1st year students,

who will be mid-way through their second laboratory rotation, will gain valuable insights into preparing for and undertaking research projects from their more experienced peers.

The conference outline:

- **Schedule**: The conference takes place around the Easter break for maximum supervisory attendance together with our industrial partners.
- **Hosting institution:** Each year, the hosting institution will rotate around the DTP partners to provide students with insight into the various research environments.
- **Attendance:** All DTP students who can attend in person would be expected to do so.
- ***Sessions:** All students in years 2-4 will present on their research project and/or training experience, in a variety of formats: 2nd year students will exhibit posters; 3rd year students will deliver "3-minute thesis"-style presentations; and 4th year students will give short oral presentations (15-minute duration) on their research projects.

**This information is for information and may change*

8.3.1 Additional activities incorporated into the conference

Additional events may include: tours of the hosting institution's research facilities; a "writing hothouse" for 4th year students to develop their PhD thesis plans; student/supervisor networking with industrial partners; and student-led evening social activity.

9 Research placements (PIPS & iPIPS)

9.1 Professional Internships for PhD Students (PIPS)

Professional Internships for PhD students (PIPS) take place during years 2 or 3 for a period of 3 months and is unrelated to your SoCoBio DTP research project. This experience is important both to help early career researchers understand the wider context of their research and to expose them to the range of opportunities in which they can apply their PhD skills and training after they graduate.

A briefing on PIPS and the related SoCoBio policy and procedures will be provided at a meeting in July in year 1 of the programme and is included as part of supervisor training. The training aspect of PIPS places great emphasis on enabling students to work on topics of interest that help them to make an informed choice of career destination. Below are some key pointers for your PIPS journey and to read about some of the PIPS experiences that previous SoCoBio students have had whilst on their placement, take a look at our PIPS case study booklet.

- **Start planning:** Plan a year in advance, in order to give yourself the best chance of obtaining the placement of your choice.
- **Planning approaches to PIPS:**
  - *Collaborative partner-designed PIPS*, where partner institutions are invited to propose internships, which will be advertised to SoCoBio students throughout the year.
  - *Student-led*, where students will work with their supervisors to approach partners to co-design their own internships, which could be undertaken in a variety of different sectors or organisations.

- **Advice and guidance:** Advice PIPS approaches and how to approach host organisations will be available in SoCoBio guidance and from administrative leads who will liaise with local careers and enterprise services to assist students with their plans.
- **PIPS questionnaire:** Together with your supervisory team you will be asked to complete a short questionnaire about your PIPS plans in Year 2, which will be reviewed by the SoCoBio PIPS lead and presented to the Industry and Impact Committee who take responsibility for reviewing PIPS activity and ensuring that every candidate completes an appropriate internship.
- **Timing of your PIPS:** Talk to your supervisors about the likely timing of the PIP early in the PhD, in order to plan the project around this.
- **Approval:** A full description of both collaborative-partner designed, and student-led PIPS must be approved by the DTP PIPS Lead or DTP Director who will confirm that the position is at an appropriate level and focused on the development of professional skills, not related to lab-based PhD research. Once approval is confirmed the placement can begin.
- **PIPS Mentor:** Each PIPS must have a named contact at the partner institution who will be responsible for the student.
- **Student agreement:** Once your PIPS has been approved an agreement will be drawn up between you, SoCoBio institution and the collaborative partner to ensure that all respective roles and responsibilities are understood to safeguard the position of all parties. This agreement will take account of the advice and guidance related to work-based learning in the UK Quality Code for HE. Local administrators are responsible for organising this agreement.

9.2 International Professional Internships for PhD Students (iPIPS)

SoCoBio students can undertake an international Professional Internship for PhD Students (iPIPS) in DAC countries. These placements align with the Global Challenges Research Funding Agenda, fostering additional collaborations between centres in DAC countries and the UK partners, and will prepare students for some of the opportunities and challenges of working with DAC partners: a potentially transformative experience for students taking advantage of this opportunity. Several SoCoBio academics are engaged in collaborations with groups in DAC countries, and the iPIPS will be organised by those academics in the first instance to ensure that the placements are appropriate. A list of available iPIPS placements will be circulated during Year 1 of the PhD programme and students are asked to contact the DTP's iPIPS coordinator, to discuss the available options.

Funding: Funding is available on a competitive basis for two bursaries to cover additional travel and accommodation costs. This may be increased depending on any co-funding from DTP partners. Details on how to make an application are in the SoCoBio DTP PIPS Handbook. Deadline for applications is the 31st March in Year 2 for each cohort, and the following information would be required in the application:

1. Details of the placement host and project
2. Reasons for undertaking an IPIPS
3. Full cost breakdown

4. Letter of support from your supervisor highlighting the benefits that will arise from the placement

The DTP Management Board will consider applications and announce successful applicants by 1 May for each cohort.

9.3 PIPS Evaluation and Reporting

Full details are in the SoCoBio DTP PIPS Handbook but in summary students would complete a Post-PIPS monitoring report to UKRI-BBSRC**,** a case study for the DTP, and sending out post PIPS feedback questionnaire to their PIPS host organisation, within three months of completion of the placement.

10 Student Discipline

As members of the University community, all students are expected to conduct themselves with due regard for the good name and reputation of all institutions in this DTP. Students are required to comply with their host institution's regulations at all times. Any allegation of misconduct will be considered within the host institutions regulations in accordance with the evidence and circumstances presented, except where misconduct takes place at a partner institution. For this scenario, any allegation of misconduct will be considered within the regulations of the institution where the misconduct took place. A student's host institution will be notified of any misconduct at another institution within the DTP and the resulting actions taken by the partner institution. Students should refer to their host institutions student handbook for further information on discipline procedures.

11 Unsatisfactory progress

Your supervisor should inform you of unsatisfactory progress as soon as it becomes apparent. They will discuss this with you and put in place steps to resolve the issue. If there is continued unsatisfactory progress, procedures laid out in your host institution's PGR handbook will be followed which may lead to Withdrawal or Termination.

The SoCoBio Management Board will monitor progress of students to ensure consistency across the partners. Attendance at SoCoBio activities is expected but is not compulsory for the award of their degree, however funding could be withdrawn if unsatisfactory attendance at such events.

12 Deferral, suspension or termination of Studies

Sympathetic consideration will be given to requests made by students for abeyance due to personal or family reasons.

Any student considering deferral, suspension or termination of studies must consult with the DTP Manager, alongside their supervisory team and host institution's Graduate School, so that they can

be advised on a case-by-case basis the options available to them and decide on the best course of action for their circumstances.

Before a decision is made on changes to candidature, students must have a discussion with a DTP representative (DTP Academic Lead/DTP Manager) and inform the DTP Manager in writing. Suspension period awarded to Students will be within the limitations set out in UKRI Training Grant Terms and Conditions.

13 Conference, visits and travel

At conferences you will meet and network with like-minded people and professionals in your area of research. Listening to talks and presentations or Q&A sessions can open new ways of thinking about a specific topic that you may not have previously thought about. Conferences are places where academics and researchers 'test' their ideas and receive critical responses. In addition, it looks good on your CV. Funding is available for attending conferences from the Research Training and Support Grant (RTSG) see section 16.3.1. However, some Societies offer conference/travel grants for members. A document listing Learned Societies offering this can be found on the SoCoBio Teams site.

14 Get involved

There are many ways in which you can engage more closely with SoCoBio and contribute to the building of a cohesive, collaborative, vibrant cross-institutional student network.

- **Enhance your leadership skills:** Volunteer as a student representative or other opportunities listed in section 14.1 below.
- **Promote SoCoBio DTP research to a wide audience:** Promote your publications, presentations, knowledge exchange or outreach experiences, and SoCoBio training events on our social media channel X (formally Twitter) @SoCoBioDtp or blog about them on the SoCoBio website https://southcoastbiosciencesdtp.ac.uk/

14.1 Student representation

Volunteer opportunities available to SoCoBio DTP Students:

Volunteer opportunities	Year	Description	contact
Committee Representatives (Management Board, Impact and Industry Committee)	All years	Student representatives will play a key role in the DTP's monitoring activities. Representatives will attend meetings and shape developments in training, collect and feedback opinions of fellow students	DTP Manager

Peer-to-peer mentors	Year 2-4	Senior peers mentoring junior cohorts. Regular training on peer-to-peer mentoring will be available.	DTP Manager
Wellbeing champions	All years	Wellbeing champions will support the DTP Wellbeing Lead to raise awareness of health issues and support DTP wellbeing initiatives. They will gather information on health issues affecting peers, signpost peers to local university services and provide a support network for peers.	DTP Wellbeing Lead
Annual Conference organisation committee	All years	This is an opportunity for students to develop leadership, teamworking skills, planning and managing the main tasks involved in a large scale, cross-disciplinary academic meeting	Call for volunteers for the committee will be open in June/July annually.
Volunteers at DTP events: Induction, interviews	All years	DTP Students can engage in a student ambassador role to promote the DTP to new students and other publicity activities.	DTP Manager/ DTP local administrators

15 Social media

Responsible communication: Communication through the DTP's digital channels (currently website, X (formally X (formally Twitter)), and LinkedIn) is important for promoting the DTP's programme and research to future students, researchers and industry in the Biosciences sector. How you communicate with people through these and your own digital channels with respect to DTP business not only reflects on you as an individual but also on the DTP. We value your communication with peers, fellow researchers, staff and outside bodies and request that you do so sensibly, professionally, lawfully, and consistently with your responsibilities; with respect for your peers, staff, the DTP and your University; and in accordance with your host institution's policy on electronic communications and other rules and procedures.

16 Finance

A SoCoBio DTP studentship comprises of a maintenance Stipend, at the UKRI recommended rate, and payment of fees (section 16.1). It also allows the student to apply for additional funding towards research expenses and other training and development opportunities (section 16.3 and 16.4) and a Disabled Students Allowance (section 16.2). The University of Southampton, as lead partner of this DTP, has devolved responsibility to operate the grant from BBSRC. In administering the BBSRC grant

the DTP operates under the USoton Financial regulations and monitors students' expenditure and funding, as agreed though a consortium agreement.

16.1 Fees & Stipend

Stipend levels and indicative fees can be found on the BBSRC website here: BBSRC/UKRI funding .

The studentship academic year starts on the 1 October and ends on the 30 September. Stipend will be paid, in advance, directly into each student's bank account by and in accordance with their local institutions' policy. In the first-year students can expect the first payment to be made by 1 October.

The studentship will cover the fees for the programme, so students do not need to pay towards this. These will be paid directly to a students' host institution.

16.2 Disabled Students Allowance (DSA)

The Disabled student's allowance is based on a student assessment of needs report, authorized by the Disability Office of the host institution, for more information visit: Get a studentship to fund your doctorate – UKRI

16.3 Training costs

The SoCoBio DTP will support all your training free of charge or at a minimal cost. Students will have access to the following funds (in addition to fees and stipend paid by your studentship) to support your training. These are administered by your host institution.

16.3.1 Research Training and Support Grant (RTSG):

(£4,000) per annum (in the first year £1,000 will be available per rotation and start of PhD project between June and September in Year 1). The RTSG is held at the host partner organisation and should be controlled by the student in consultation with their supervisor. It is intended to be used to pay for

i) project experimental costs such as laboratory consumables, materials and laboratory analysis
ii) project expenses such as safety equipment, which the student and supervisor deem to be in direct support of a student's research
iii) research conference and seminars (travel, subsistence, and registration).
iv) supervisor meetings held at partner institutions (travel expenses by student and supervisors)

Refer to host institution administrator for details on management of this fund.

16.3.2 Fieldwork:

This fund is available to students to support additional training which the student and supervisor deem to be in direct support of a student's research. For example, when students journey to/from formal training activities at a partner organisation. Please speak to the DTP Manager about how to access this fund.

16.3.3 PIPS additional expenses:

Up to £1000 is available to cover travel and accommodation costs associated with a student's PIPS. During a PIPS students will continue to receive their stipend and will remain registered as the student's host DTP partner. Students cannot therefore be paid during their placement however PIPS hosts can contribute financially towards the cost of travel and accommodation associated with the placement if that support is available. For IPIPS bursaries refer to section 9.2

16.4 Additional Funding Opportunities

Details of additional funding opportunities available from the BBSRC Flexible supplement Fund (FSF) are listed below. There are no deadlines for applications to this fund and applications are considered on an ad-hoc basis. To apply you will need to complete an application form providing a supporting statement, supervisor signature (if appropriate) and budget for anticipated costs.

Contact the SoCoBio DTP Manager SoCoBio@soton.ac.uk for an application form and evaluation criteria.

Applications will be considered by the SoCoBio Management Board at their next Board meeting and a decision communicated to students shortly after.

Funding	
Impact fund – student-led outreach initiatives	Student led outreach initiatives including designing and delivering short 'hands-on' sessions for schools located in low quintile POLAR4 regions. The intention is that this activity will provide DTP students a forum to develop accessible science communication skills while raising aspirations of young people particularly from under-represented groups.
Travel bursary scheme	To allow DTP student-led engagement with external non-academic organisations (e.g. industry, government-funded facilities, charities, policy groups, publishers and communications organisations). Work shadowing and mentoring meetings will be actively promoted to foster professional, enterprise and transferable skills development.
Childcare fund	To complement existing institutional initiatives to enable students with childcare responsibilities the opportunity to fully engage with cohort-building activities and summer school events.
iPIPS	Bursaries to support students on IPIPS placements in DAC countries with additional travel and accommodation costs.

17 Useful links

17.1.1 University of Southampton Links

Doctoral College https://www.southampton.ac.uk/doctoral-college/

PGR Handbook https://sotonac.sharepoint.com/teams/PGRhandbook

Student Hub (first point of contact for questions and concerns relating to fees, financial support, accommodation, wellbeing, disability, careers and course administration) : https://www.southampton.ac.uk/studentservices/index.page?

Doctoral College training: https://www.southampton.ac.uk/doctoral-college/professional-development-programme/index.page

University of Southampton GradBook https://www.gradbook.soton.ac.uk/

PhD Regulations http://www.calendar.soton.ac.uk/sectionV/mphil-phd.html

Code of Practice for Research Candidature and Supervision (paragraphs 34 – 40) http://www.calendar.soton.ac.uk/sectionV/code-practice.html

University guidelines on thesis preparation etc. http://www.southampton.ac.uk/quality/pgr/research_degree_candidature/completion.page

Quality Handbook - guidance on academic qualification including the definition of doctoral level competencies and outputs. https://www.southampton.ac.uk/quality/pgr/index.page

Research & Innovation Services http://www.southampton.ac.uk/quality/pgr/research_degree_candidature/ethesis_deposit.page? Ethics Policy: http://www.southampton.ac.uk/ris/policies/ethics.html

Academic Integrity Statement for Students can be found in the Academic Integrity Guidance for Students at: https://www.southampton.ac.uk/research/integrity.page

Academic Integrity Procedures for Postgraduate Research Students https://www.southampton.ac.uk/calendar/sectioniv/index.page

Regulations, Policy and Student charter http://www.calendar.soton.ac.uk/sectionIV/ipr.html

Enabling services: http://www.southampton.ac.uk/edusupport/

17.1.2 University of Portsmouth Links

Research and Innovation at Portsmouth: https://www.port.ac.uk/research

PhD at Portsmouth: https://www.port.ac.uk/study/postgraduate-research/research-degrees/phd

Research Centres: https://www.port.ac.uk/research/research-centres-and-groups

Research Themes: https://www.port.ac.uk/research/themes

Graduate School: https://www.port.ac.uk/study/postgraduate-research/graduate-school

Graduate School development programme: https://www.port.ac.uk/study/postgraduate-research/graduate-school/graduate-school-development-programme-and-other-researcher-training

Research Culture: https://www.port.ac.uk/research/research-culture

Accommodation: https://www.port.ac.uk/student-life/accommodation

Maps and Directions: https://www.port.ac.uk/about-us/contact-us/maps-and-directions

Coronavirus Information: https://www.port.ac.uk/life-at-uni/covid-information-for-students

17.1.3 University of Kent Links

Code of Practice for the Quality Assurance for Research Programmes of Study

https://www.kent.ac.uk/education/regulatory-framework/codes-of-practice-for-research-courses

Academic Regulations for Research Programmes of Study

https://www.kent.ac.uk/education/regulatory-framework/academic-regulations-for-research-courses

Research Supervision

https://www.kent.ac.uk/education/documents/code-of-practice-research/code-of-practice-research-annex-h.docx

PGR Handbook

https://media.www.kent.ac.uk/se/38458/BT_133932_PGR2023_FINAL_A4_web.pdf

Online Training and Resources

https://www.kent.ac.uk/graduate-researcher-college/skills-training

Researcher Development

https://www.kent.ac.uk/graduate-researcher-college/skills-training/researcher-development-programme

Research Ethics and Governance

https://www.kent.ac.uk/research-innovation-services/research-ethics-and-governance

Kent Student Services

https://www.kent.ac.uk/student-services

Graduate and Researcher College

https://www.kent.ac.uk/graduate-researcher-college

Postgraduate Student network

https://kentunion.co.uk/networks/postgraduate

17.1.4 University of Sussex Links

Sussex Doctoral School

http://www.sussex.ac.uk/internal/doctoralschool/

Sussex Researcher Development Programme (Doctoral Training Workshops)

http://www.sussex.ac.uk/internal/doctoralschool/researcherdev/

Mental Health and Wellbeing for Doctoral Researchers

http://www.sussex.ac.uk/internal/doctoralschool/wellbeing

Advice for new Doctoral Researchers

http://www.sussex.ac.uk/internal/doctoralschool/new-doctoral-researchers/induction

Sussex Research Student Administration Office (guidance on registration and regulations)

https://www.sussex.ac.uk/rsao/

Sussex Doctoral Student Handbook

https://www.sussex.ac.uk/rsao/documents/handbook-for-doctoral-researchers-2015-16-whole.pdf

Sussex Doctoral Supervisor Handbook

https://www.sussex.ac.uk/rsao/documents/supervisor-handbook-2015-16-whole.pdf

Research and Enterprise (guidance on IP)

http://www.sussex.ac.uk/staff/research/co Section 17.1.4ntractsandip

17.1.5 NIAB at East Malling Links

Research at NIAB

https://www.niab.com/research

Training

https://www.niab.com/services/training

Plant characterisation

https://www.niab.com/services/plant-characterisation

Plant Breeding

https://www.niab.com/services/plant-breeding

NIAB Ventures

https://www.niab.com/niab-ventures

Appendix A - Forms

Rotation project selection and final PhD project selection forms are now MS Forms. Links will be provided to each cohort with guidance on how to complete the form and deadlines.

Appendix B – M-Level modules DTP partner access information

M-Level modules at the University of Southampton

SoCoBio Students may audit modules offered at any level of study within the University of Southampton. Use the Module Finder to located modules of interest https://www.southampton.ac.uk/courses/modules.page . Students considering auditing a module are encouraged to consult their supervisory team for advice before doing so. Guidance on auditing can be found here Auditing of Modules | Quality Handbook | University of Southampton.

PhD students are directed to 3rd year modules with a Masters option (6000-level code) or any appropriate UG or PG module. BIOL6052 Data Management and Generalised Linear Modelling for Biologists is good for statistical skills and biomedically orientated students may be interested in MED16049 Research Skills for Biomedical Science 1.

M-Level modules at the University of Sussex

Sussex Master's modules are listed here:
https://www.sussex.ac.uk/study/modules/postgraduate

Contact Amanda Britt (Administrator, contact details in section 4.3.1) for further information.

M-Level modules at the University of Kent

SoCoBio Students may join modules (without the requirement to complete exams or coursework) offered at any level of study within the University of Kent. Contact Rebecca Groves (Administrator, contact details in section 4.3.1) for further information about modules. Students considering joining a module are encouraged to consult their supervisory team and then obtain permission from the module convenor to join.

MLevel modules at the University of Portsmouth

Contact Anthony Lewis (Senior Academic Lead, contact details in section 4.3.1) for further information.

Date of Issue	Issue number	Description of revisions
6/10/2020	1 2020/21	-
14/1/2021	2 2020/21	Key contact table updated Section 5.4 Rotations added
10/3/2021	3 2020/21	Section 4.1 updated Section 5.4 updated Section 5.5 updated Appendix A added Appendix B added
13/5/2021	4 2020/21	Section 5.3 updates Section 5.4.5 added
23/9/2021	5 2021/22	Section 5.2 & 6.1 updated Section 6.8 updated Section 8.1 updated Section 12 updated Section 16.4 updated Appendix A forms updated
23/11/2021	6 2021/22	Appendix A forms removed
13/4/2022	7 2021/22	Section 5.3.2 calendar added
10/10/2022	8 2022/23	General document update
14/11/2022	9 2022/23	Section 6.8 UPort hyperlink updated General update of UKent links Section 11,9.3,5.5 updated
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