

Student Handbook 2019-20

UKRI BBSRC EASTBIO

Doctoral Training Partnership



eastbio
the East of Scotland Bioscience Doctoral Training Partnership



BBSRC
bioscience for the future

Welcome to EASTBIO

EASTBIO is the East of Scotland Bioscience Doctoral Training Partnership (DTP). It was established in 2012 with funding from the Biotechnology and Biological Sciences Research Council (BBSRC), which is part of UK Research and Innovation. Our partnership comprises the universities along the East coast of Scotland, a key region in the UK for life sciences in terms of both academic excellence and industrial support and investment. The primary aim of EASTBIO is to deliver world-class interdisciplinary training to bioscience PhD students and to build interactive vibrant student cohorts. In addition to providing enhanced training to our students, the partnership offers outstanding opportunities for collaborative research, access to expertise and research facilities across the universities of the East of Scotland.

The EASTBIO academic partners are:

University of Aberdeen

University of Dundee

University of Edinburgh

University of St Andrews

Our associate partners are:

The James Hutton Institute

Scotland's Rural College (SRUC)

Scottish Universities Life Science Alliance (SULSA)

Studentships:

Our first cohort of 34 students started in autumn 2012, with core funding from BBSRC, coupled with additional funding from each of the partner universities. This autumn we welcome our eighth cohort of 39 students.

Research themes:

The EASTBIO student projects are designed to meet key priority areas, outlined in the BBSRC strategic plan: www.bbsrc.ac.uk/funding/priorities/priorities-index.aspx

Agriculture and Food Security (AFS)

Industrial Biotechnology and Bioenergy (IBB)

Bioscience for Health (BfH)

World Class Underpinning Bioscience (WCUB)

contents



Page 2

Welcome

from the EASTBIO
Academic Management
Group

Page 4

EASTBIO

Training Programme

1. Introduction

Page 6

2. Overview

Page 8

3. Summary and Requirements

Page 9

4. Training Plan and Record

5. Training costs



Page 10

6. Year-by-year Training

I. Year 1

- Foundation Training
- a. Research Skills Subject-specific Training
- b. Foundation Masterclasses
- c. Transferable Skills
- d. SysMIC: Systems Training in Maths, Informatics and Computational Biology

Page 12

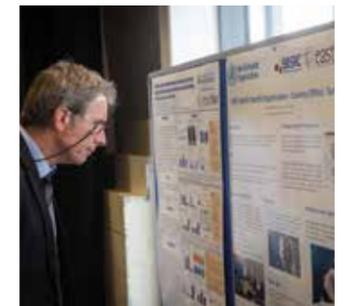
II. Year 2

- Advanced Training
- a. Advanced Core Biosciences
- b. Advanced Technology Training
- c. Transferable Skills

Page 13

III. Year 3

- Professional Training
- a. Transferable Skills: Student Retreat
- b. Professional Internships for PhD Students (PIPS)
- Industrial CASE Studentships



Page 18

IV. Year 4

- Consolidation Transferable Skills
- V. Year 1 to 4
- Annual Symposia Training

Page 19

7. Feedback on training

8. Duty of Care

Page 20

Get involved!

Page 22

EASTBIO Contacts

Welcome from the EASTBIO Academic Management Group

Welcome to the EASTBIO Doctoral Training Partnership community. You have beaten off stiff competition to receive one of our prestigious studentships and are at the start of an exciting four-year journey through your PhD. We hope that this Handbook, our Induction Day and the EASTBIO website will help you familiarise yourselves with the aims of the partnership and our training programme.

EASTBIO is a partnership of four universities – Aberdeen, Dundee, Edinburgh and St Andrews – and each of you will be registered in a host school or department within your university. Although you will follow the local training and assessment programme of your host institution, you are an EASTBIO PhD student and will receive additional training including:

- research training through participation in interactive discussion groups run across the partnership, which will provide you with insight into the key questions and challenges in your research area and enable you to build your own collaborations with researchers working in your field across the four universities;
- enhanced training in quantitative and analytical core bioscience skills through our foundation masterclass programme;
- access to advanced technology and core bioscience training courses across the partnership;
- specific transferable skills training with your peer cohort;
- an exciting opportunity to undertake a Professional Internship for PhD Students (PIPS) training, which will provide you with an opportunity to learn valuable professional skills in the workplace;
- an opportunity to attend a student retreat on Loch Tay;
- finally, our annual symposia – a platform for you to share your research with the EASTBIO community and learn more about the impact of bioscience research on the world around us.

We expect that throughout your PhD each of you will take a proactive approach to your own training and development with the support of your supervisors and EASTBIO. You will be asked to complete and update your training plan and we will monitor these to help ensure that you complete your PhD within four years, and graduate with a set of valuable skills that will enable you to compete successfully with the best in the world in your chosen career.

As a new PhD student, you will be establishing yourselves in an exciting, vibrant research environment - meeting lots of new people, possibly finding your way around in a new city, country or culture and being bombarded with information on just about everything. If any of us can assist you with settling in, please don't hesitate to contact us (contact details are provided at the end of this Handbook).

We look forward to meeting you in person and welcome you to the EASTBIO programme at our Induction Day, which is hosted by the University of Dundee on **Tuesday the 8th of October 2019** at the West Park Conference Centre. The induction day will be followed by a masterclass on Statistics and Experimental Design on **Wednesday the 9th of October 2019**.

You will meet the other new EASTBIO students and supervisors at this induction and networking event, get the chance to interact informally with existing EASTBIO students and connect over dinner and a social outing.

We wish you an excellent start to your studies, **The EASTBIO Academic Management Group**



Professor Clare Blackburn
EASTBIO Director, University of Edinburgh,
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THE UNIVERSITY
of EDINBURGH



Professor Bernadette Connolly
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THE UNIVERSITY
of EDINBURGH

EASTBIO Training Programme

1. Introduction

The EASTBIO training programme is aligned with the Vitae Researcher Development Framework and aims to support both your professional and personal development throughout the four years of your PhD. As an EASTBIO PhD student, you will be part of a wider network of postgraduate bioscience research students and we hope that the interactions that you will establish with your fellow EASTBIO students will extend beyond your PhD.

The bioscience careers of the future require individuals equipped with knowledge and cutting-edge skills that combine **quantitative** and interdisciplinary approaches to addressing complex biological problems, with expertise in advanced technologies. The EASTBIO training programme in Years 1 and 2 is designed to help you develop these crucial skills.

To be successful in your future career you also have to develop a range of personal skills, such as effective communication, leadership, initiative and resilience. The EASTBIO transferable skills programme in Year 1 to 4 and the EASTBIO Annual Symposia, which you can help organise, both aim to build your personal skills, your confidence and independence.

Finally, the EASTBIO Professional Internships for PhD students provide you with the unique opportunity to try something different from your research in the lab. The invaluable experience of working in a non-academic environment will make the transition into your professional bioscience career much easier at the end of your PhD.

The EASTBIO training programme incorporates the above training elements, including the Professional Internships for PhD students (PIPS), structured around each year of the doctoral study:

Year 1: Foundational Training

Year 2: Advanced Training

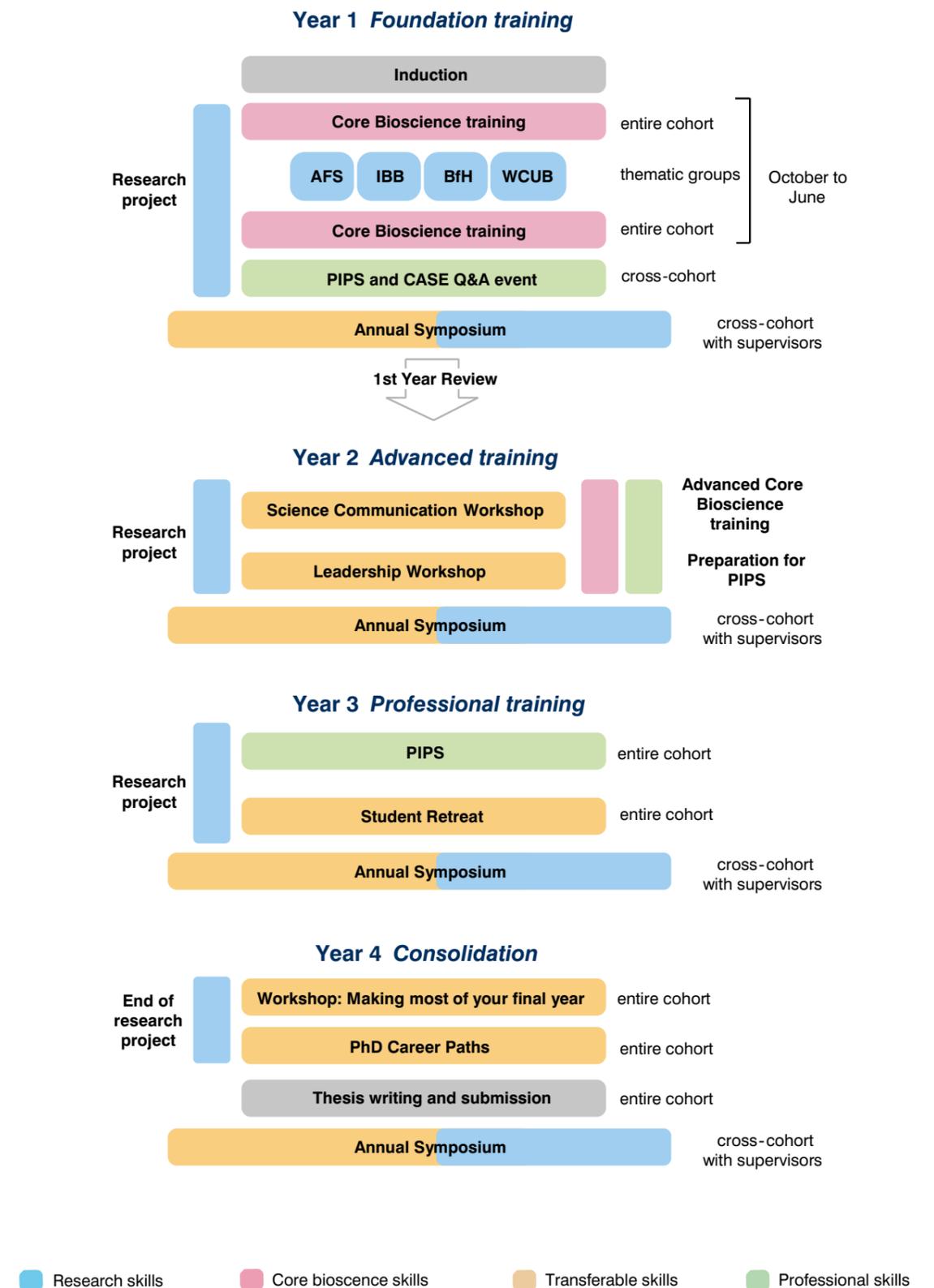
Year 3: Professional Training

Year 4: Consolidation

The following pages, and the Overview and Summary tables, provide more detailed information about the training within each year of your PhD and explain what is expected from you at each stage of your PhD. As well as the information in this Handbook, you should keep an eye on your inbox and the EASTBIO website www.eastscotbiodtp.ac.uk for further training updates, news and developments.



EASTBIO Training Programme



2. Overview

We recognise that each of you will start the EASTBIO PhD programme with different abilities, experiences and aspirations. For this reason we have specific minimum expectations regarding the amount of training we expect you to complete each year during the four years of the programme, including some key events and components that are mandatory for all EASTBIO PhD students (see pages 8-9).

Year 1 - Foundation Training

In the first year of the EASTBIO PhD, we expect you to establish the foundation upon which you will build the development of your skills in subsequent years. Therefore, most training events in Year 1, such as the **Thematic group meetings** (Research skills), **Masterclasses** (Bioscience skills), including the **Presentation skills workshop** (Transferable skills), are mandatory and carry training points for attendance at these events (see pages 10-11). This may sound like a lot of training, but based on our past experience, we are sure that you will enjoy interacting with experts from different universities and research fields, meeting frequently with your fellow EASTBIO students from across the partnership and building your own research and support network.

To progress into Year 2, you have to achieve a minimum of **120 training points** in addition to passing successfully the first-year assessment at your host university/department. We expect you to complete the 120 points within 18 months of the study start date, with a **minimum of 100 points collected by the end of Year 1**. Any concerns about the timeline should be discussed early with your supervisor(s) and your local EASTBIO Academic Representative.

Year 2 - Advanced Training

In the second year, we expect you to focus on your research and to develop further your core bioscience skills by taking optional advanced training courses. Many courses are available locally, but as an EASTBIO student you have access to all **practical advanced technology training** and **advanced core bioscience courses** at all four partner universities. Information of these training opportunities is published and updated on the EASTBIO website. We strongly encourage you to make the most of these excellent training opportunities that are available to you uniquely as an EASTBIO student.

As you will be expected to actively participate and help organise the EASTBIO Annual Symposia and the third-year Residential Student Retreat, EASTBIO will provide you with specific transferable skills training through two separate **workshops** on **'Science Communication'** and **'Leadership'** respectively.

EASTBIO will not prescribe which specific training courses you should take, but we expect you to undertake at least **20 hours** of core bioscience training in Year 2; this is to be recorded on your online Training Plan and Record but does not carry any training credit points (see section 3, below). However, attendance of the two EASTBIO-specific transferable skills training workshops, mentioned above, is **mandatory for all second-year students**. If you are unable to attend such training, you must contact the EASTBIO Administrator and propose alternative options (see below for our Cancellation Policy).

We also expect second-year students to attend **at least one of the four thematic group meetings** and interact with the first-year student and supervisor cohort.

Year 3 - Professional Training

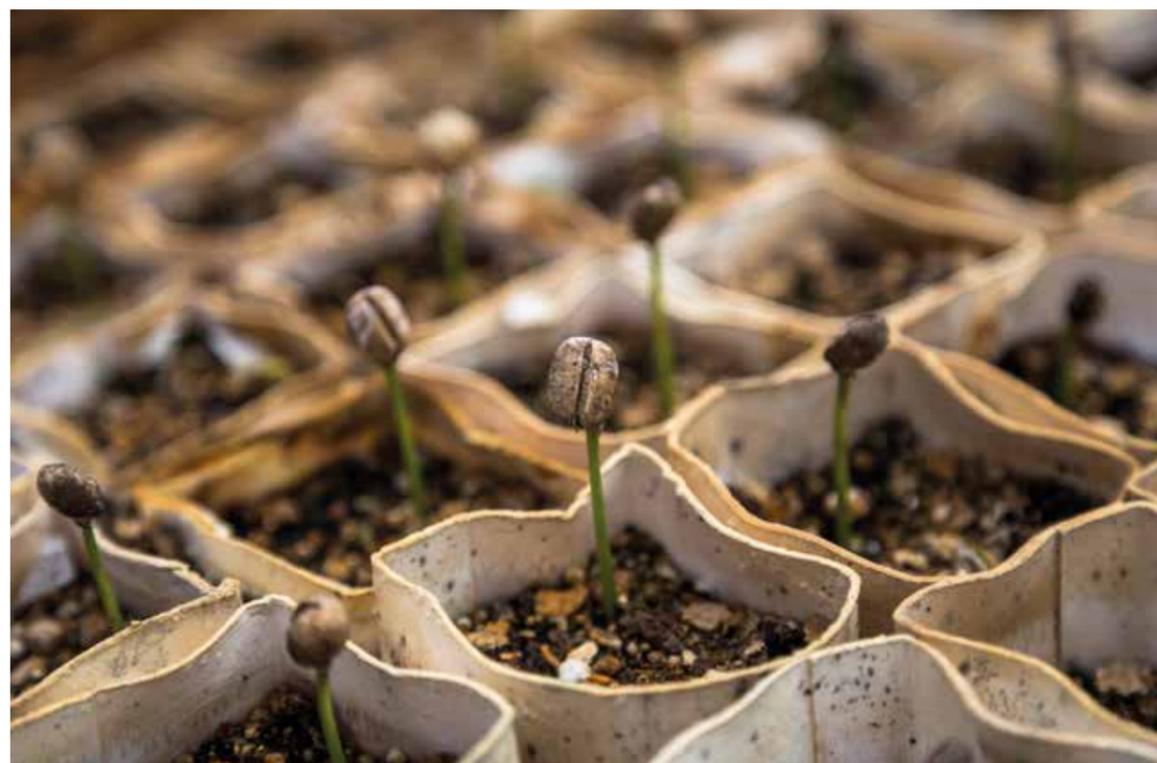
Anytime between month 12 and 36 of your PhD, you will be undertaking your **Professional Internship (PIPS)**, which you will plan and prepare for in the first year of your PhD. Therefore, this year is mostly free from other mandatory training events. However, we expect you to share your PIPS experience with your fellow EASTBIO students, if invited, at the **PIPS and CASE Q&A event (Dundee, 4 February 2020)**, the Annual Symposia on the Societal impact of life sciences research (Dundee, 11-12 June 2020), or the Induction Day Q&A session; as PIPS is a unique feature of our programme, it is no wonder that students are keen to find out more about it, as a lived experience. Finally, EASTBIO will provide funding, guidance and support for a **third-year Student Retreat (Firbush, 8-10 April 2020)** and will help you organise specific retreat activities. The aim is to allow you to focus on specific aspects of the EASTBIO programme, learn from guest alumni/ae or run a hands-on workshop; more details below (see page 13).

Year 4 - Consolidation

In the final year of your PhD, we expect you to focus on finishing your research project and writing up your thesis. We expect you to submit your thesis by the end of August 2023. To help you with taking the next step in your professional career, EASTBIO will hold two workshops – **'Making the most of your final year'** and **'Post-graduation skills'** – for all final year students (attendance mandatory).

As UKRI BBSRC-funded students, you are also encouraged to engage with BBSRC-initiated training events and activities – such as **The Biotechnology Young Entrepreneurs Scheme (YES)**, **Impact Writing Competition**, etc. – as an important element of your transferable and scientific skills training.

To make the most of the training offered by EASTBIO and partner universities, as well as keep track of your development, we require all students to develop and update regularly their training Plan in each academic year. You will be sent reminders about the deadline for submitting your training Plan and Record to EASTBIO at the end of Years 2 and 3.



3. Summary and Requirements

After Induction Day, you will receive specific instructions about how to fill and submit your Training Plan and Record form. We ask you to complete and submit your Training Plan and Record by **the 21st of October 2019** (with choice of masterclasses).

This will allow us to generate registration lists for all our training, as well as monitor attendance and your overall training credit points as you proceed from first to second year. Please note that you can update the information on your Training Plan form at any point after submission.

The following table summarizes the EASTBIO Training Programme in terms of the mandatory components, as they run each year. Please note that your first-year Training Plan **should lead to an aggregate of at least 120 training points**, 100 of which to be collected by the end of Year 1. Extensions requests need to be discussed with the local academic representative.

Cancellation Policy: You are expected to attend our mandatory training and training you have registered to attend (e.g. masterclasses). To cancel your attendance, and after having first discussed with your supervisor(s), please contact EASTBIO as soon as possible by providing an adequate reason for cancelling – reason related to an already confirmed research commitment, serious personal circumstances such as sickness, or reasons beyond your control, such as transport disruption, industrial action, adverse weather, etc. We will invite any student who failed to attend mandatory training for a reason the next time that training will run (usually the following year). Should you fail to notify EASTBIO, a financial penalty will apply in the form of a reduction to the RTSG for the following year: £100 per one day training events (masterclasses; thematic group meetings; transferable skills workshops); £250 for the third-year Furbush Student Retreat; £500 for the Annual Symposium.

Training: Type, year of study and credits

Name of training event	Year	Requirements
Induction Day	1	Mandatory, 10 training points
Symposium	1-4	Mandatory, 20 training points in Y1
PIPS and CASE Q&A event	1	Mandatory, 10 training points
PIPS	2-3	Mandatory (no points)
Thematic group meetings (4)	1 (& 2)	10 training points each
Practical Advanced Technology Training	1 & 2	Optional (no points)
Foundation Masterclasses (7)	1	10 training points each
SysMIC	1	Limited places, offered on a competitive basis; 30 training points (module I); 50 training points (module I and II)
Advanced Bioscience Skills	2-3	Optional (no points)
Leadership Workshop	2	Mandatory (no points)
Residential Student Retreat	3	Mandatory (no points)
Making the Most of your Final Year Workshop	4	Mandatory (no points)
Post-graduation skills Workshop	4	Mandatory (no points)
Other training (non-EASTBIO)		Optional (no points) – To be recorded on online student Training Plan and Record

4. Training Plan and Record

In Year 1, you should assess your training requirements and complete your Training Plan after you have discussed the available options with your supervisor(s). You should record your training throughout the year and update your Training Plan at the beginning of each new academic year. All first-year students must finalise their choice of masterclasses and the rest of their first-year training plan by the **21st of October 2019**.

You must update your Training Record at the end of your first year by the **31 May 2020**. Please record both EASTBIO and any local training that you attend. It is your responsibility to ensure that all your training documents are up to date within these deadlines. Please remember that progression to the second year of your PhD depends on whether you have fulfilled the EASTBIO training requirements.

Delayed submission of your Training Plan and Record may result in late or cancelled stipend payments.

The key contact for any queries to do with EASTBIO training is the EASTBIO DTP Administrator (see Contacts, below).

5. Training costs

We aim to provide all your training free of charge or at a minimal cost. Each of you will have access to the following funds (in addition to fees and stipend paid by your studentship) to support your training:

- **Research Training Grant:** £5,000 per annum (this is reduced to £2,000 in year 4). This grant may be held directly by you or your supervisor or it may be held by your department. It should be used to cover the research costs incurred by your project and may also be used to purchase a laptop at the start of your programme and cover any additional travel and training costs incurred during each year (including EASTBIO training activities). Please ask your local administrator if you are unsure about how to access these funds (see Contacts, below).
- **Travel and conference allowance:** £230 per year which will cover most of the expenses involved where training is delivered in person rather than online. Please ask your local administrator if you are unsure about how to access these funds.
- **PIPS Additional Expenses:** Where your PIPS will incur significant additional costs, you can apply to our competitively allocated small bursary competition.

Further details can be found in the 'Professional Internships for PhD students Guide for Students'.

- **Disabled Students Allowance (DSA)** – based on a student assessment of needs report, authorized by the Disability Office of the host institution; for more see <https://bbsrc.ukri.org/skills/investing-doctoral-training/disabled-students-allowance/>.

6. Year-by-year Training

I. Year 1: Foundation Training

a. Research Skills Subject-specific Theoretical Training

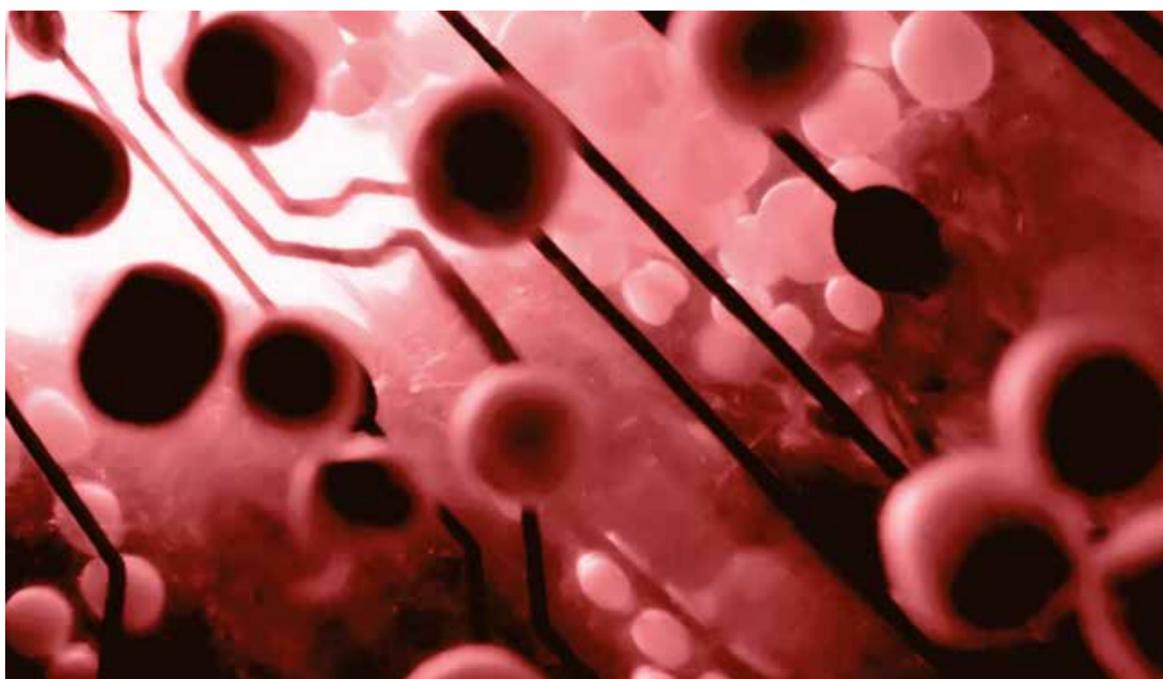
EASTBIO student projects starting in 2019 were designed around four key research themes:

- **Agriculture and Food Security (AFS)**
- **Industrial Biotechnology and Bioenergy (IBB)**
- **Bioscience for Health (BfH)**
- **World Class Underpinning Bioscience (WCUB)**

Details of which research theme you belong to and how the thematic groups will operate will be given at Induction on the 8th of October.

During this training, you will take part in **4 face-to-face meetings** taking place every two months (starting from December 2019) at different locations across the partnership. These meetings will be based on group discussions, interactive presentations/workshops, literature review, facilities tours, etc. The aim is to introduce challenges, questions and tools that are key in your theme-specific research area and to develop your critical reading skills, as well as your collaborative understanding and capacity. The thematic groups will also provide you with an excellent opportunity to meet other EASTBIO students and supervisors working in complementary research areas, to share expertise and establish collaborations. Students and supervisors are encouraged individually or as a group to host at least one meeting at their university/department. Joint meetings between the thematic groups are also encouraged. For examples of thematic group training activities from past years, please visit the EASTBIO website - <http://www.eastscotbiodtp.ac.uk/year-1-foundation-training>, under the 'thematic training' section.

Schedules of thematic group meetings and additional materials/information will be regularly posted on the EASTBIO website throughout Year 1, so please check the training pages regularly.



b. Foundation Masterclasses

The following one-day foundation masterclasses will be offered to all first-year EASTBIO students:

- Statistics and Experimental Design (9 October 2019)
- Introduction to MATLAB (29 November 2019)
- Imaging (17 January 2020)
- Dynamic Modelling for Systems Biology (23 January 2020)
- Genomic Approaches (24 April 2020)
- Proteomics and Mass Spectroscopy (spring date TBC)
- Primer for Synthetic Biology (spring date TBC)

All masterclasses will be held in Dundee. Details, summary outlines and updates will be confirmed and circulated shortly, and will be published on the EASTBIO web site at:

www.eastscotbiodtp.ac.uk/foundation-masterclasses

c. Transferable Skills

To be competitive in your future career, it is vital that you engage with training beyond the essentials needed for your own research. As the knowledge economy expands, employers expect advanced professional skills in addition to excellent qualifications. Therefore, the acquisition and development of personal transferable, employment-related and research-oriented generic skills is an important part of your postgraduate training.

These skills, which complement your academic research and enhance your employability prospects, will give you a competitive edge both now and in future. You will be undertaking some of this training locally, at your host institution, and we expect you to plan and record this training in your Training Plan and Record. However, EASTBIO aspires to train the future leaders in bioscience research and, to enable you to develop as such, we provide both a specific transferable skills programme in Years 2 to 4 of your PhD and the opportunities to apply these skills by contributing to the organisation of key EASTBIO events.

Presentation Skills Workshop (part I - presentation on student research project, by 8 April 2020, with individual feedback provided; part II – face-to-face workshop & presentations, Edinburgh, 17 April 2020): this workshop is for first-year and, depending availability, will be open to second-year students. It helps to develop presentation skills with emphasis on interdisciplinary audiences.

d. SysMIC: Systems training in Maths, Informatics and Computational Biology

SysMIC is an outstanding online course, which provides extensive training in mathematics, statistics and computational methods used in life sciences. The course is put together and delivered by scientists from University College London, The Open University and the University of Edinburgh. A quick introduction to it will be part of the Induction Day schedule. SysMIC is funded by the BBSRC as a powerful training platform for members of its research community.

In 2019-20, EASTBIO will invite applications by first-year students for a total of 6 funded spaces worth £800 each, awarded on a competitive basis. Information about how to apply will be circulated after the Induction Day. If you are successful, you are expected to complete module I of SysMIC within your first two years of study (by September 2021), gaining 30 points for Module I (or 50 points for both module I and II). Failure to complete the course may carry a financial sanction. We encourage you to speak to other EASTBIO students who have previously completed the course (details available upon request).

For more information see:

http://sysmic.ac.uk/course_details.html and www.eastscotbiodtp.ac.uk/sysmic-course.

II. Year 2: Advanced Training

Conducting cutting-edge bioscience research in the twenty-first century requires you to develop a broad understanding of multidisciplinary approaches that are used for addressing complex biological problems, as well as strong quantitative skills to analyse the vast datasets that are the output of contemporary bioscience research. The EASTBIO training will enable you to build the foundation of your multidisciplinary and quantitative skillset in Year 1 and develop it further in subsequent years.

a. Advanced core bioscience skills

These courses build on the skills developed in Year 1 through the foundation masterclasses and are open to all second and third-year EASTBIO students. Courses include:

I – Mathematics and data analysis

- Advanced statistics and error analysis
- Programming in Python
- R/Bioconductor and Unix
- Next-Generation sequencing data analyses and mining
- NVivo qualitative data analysis

II – Multidisciplinary approaches to understanding biological systems

The EASTBIO partners offer a large number of postgraduate taught MSc courses open to all EASTBIO students, addressing directly the development of multidisciplinary areas of research. These include MSc course modules in:

- Synthetic Biology
- Medicinal Chemistry
- Drug Discovery
- Chemical Biology
- Physical Techniques in Chemistry

Further information and relevant links for each course can be found at www.eastscotbiodtp.ac.uk/year-2-advanced-training#advancedbioscience.



b. Advanced technology training

Most courses offered by the partner universities are available to EASTBIO students across the partnership. These include but are not limited to:

- **Microscopy:** UoE, UoD and UoA
- **Genetic Engineering and Genome analysis:** UoE
- **Proteomics and protein purification:** UoE /SULSA
- **Protein crystallography:** UoStA
- **Flow cytometry:** UoA, UoD, UoE

The research training provided by EASTBIO will supplement the training that you will receive in your research group and host department. Do take advantage of any training opportunity available to you, including optional undergraduate and MSc modules, journal clubs, seminars and conferences in your field, as well as training opportunities offered to BBSRC-funded students that you will be notified about by EASTBIO during the course of your studies. We expect all EASTBIO students to be actively involved in the research culture of their host institution and to act as EASTBIO ambassadors by widening the PhD student network across Scotland.

c. Transferable Skills

- **Leadership and Entrepreneurship Workshop (Dundee, 14 November 2019):** this event (mandatory for second-year students) focuses on different aspects of leadership and entrepreneurship.
- **Science Communication - “Telling Tales: The Importance of Narrative in Science” (Dundee, 11 March 2020):** this event (mandatory for second-year students) focuses on developing the skills you need to communicate your research effectively to scientific and non-scientific audiences.

III. Year 3: Professional Training

Transferable Skills: Residential Student Retreat

All EASTBIO students are required to attend specific transferable skills training events at key stages of the programme. You should record this training in your training record form.

In your third year, you will be attending the three-day Student Retreat (Firbush, 8-10 April 2020): this is a student-led event, mandatory for third-year students and optional for second-year students. EASTBIO will provide guidance, funding and support to student representatives volunteering to organise the retreat at the Firbush Point Outdoor Centre, located on the shores of Loch Tay near Killin, Scotland. The Firbush centre is equipped with a seminar room, excellent social space and extensive equipment for outdoor sports. For more information, please visit www.ed.ac.uk/sport-exercise/outdoor-centre.

In the three-day residential retreat, you will have the opportunity to meet other EASTBIO students and share with them your research experience and project progress, or future plans, relax and enjoy a variety of outdoor activities. Through your student reps, you can help shape the schedule around a specific topic of your choice, whether relating to training, an interactive workshop, guest talks, etc. EASTBIO will offer additional support and advice should you decide to invite speakers or run a specific transferable skills workshop.

For an example of last year's retreat, please visit the EASTBIO website at www.eastscotbiodtp.ac.uk/year-3-professional-training.

Professional Internships for PhD Students (PIPS)

To be undertaken between months 12 and 36 of your EASTBIO PhD

The Professional Internships for PhD students are unique to BBSRC-funded DTPs and form an essential and mandatory component of the EASTBIO PhD programme. The only exceptions to this requirement are: (a) Tier-4 visa holders will not carry out PIPS due to visa restrictions and (b) CASE students who must spend a minimum of 3 months placement with their CASE partner company instead. Undertaking a PIPS or CASE internship will expose you to a non-academic professional work environment and provide you with experience and confidence that will make the transition into the next stage of your career easier to achieve. PIPS is an excellent opportunity to explore your aspirations and try something new. Internships can be undertaken in any field or sector of non-academic activity, including biotech industry, business administration, communications, scientific publishing, project management, teaching and outreach.

You will receive guidance, advice and support while organising your placement. To prepare you for PIPS, the EASTBIO PIPS coordinator Dr Caroline Pope will hold a specific event which you must attend: **PIPS and CASE Placement Q&A event** (4 February 2020, Dundee – mandatory for first-year students).

EASTBIO PIPS are undertaken sometime in the second or third year of your PhD. You will find all essential information about PIPS in the EASTBIO 'PIPS Student Guide' and on the EASTBIO website at: www.eastscotbiodtp.ac.uk/information-current-students.

1. What type of internship is suitable for PIPS?

PIPS is a defined project with tangible outcomes that can be carried out in any non-academic organisation, as long as it gives you a professional experience outwith your immediate research-related environment. This is a chance to think creatively about the types of experience you would like to gain so that PIPS will benefit your career in the long term. This is not a stop-gap but a valuable life experience.

The following are just a few examples:

- carrying out an applied research project in industry;
- managing a non-research project;
- administering a research project or grant;
- developing policy for a research council or government;
- carrying out a marketing project for a company or organisation;
- communicating science to the public or younger audiences through an outreach programme;
- developing or helping to develop a new product or service for a company.

2. Planning your PIPS

It is important to think of the following possible constraints:

- the timing of your most important experiments;
- field-work seasons you may need to work around;
- resource bottle-necks in your research project;
- conferences, meetings and training you may want to attend;
- family commitments;
- costs associated with your internship such as travel and accommodation.

You may also want to complete some relevant generic skills training in preparation for PIPS, such as:

- CV-writing and interviewing skills;
- entrepreneurship;
- time management;
- communication skills.

3. What is expected from you with regards to PIPS?

To be undertaken between months 12 and 36 of your EASTBIO PhD

We are confident that you will take a proactive approach in organising your placement. The following points summarise what EASTBIO expects from you:

- source a suitable PIPS project with a suitable PIPS provider;
- plan the PIPS into your PhD work in collaboration with your PhD supervisor(s);
- complete all the necessary paperwork (forms, agreements, risk assessment approvals) for your PIPS and communicate them to EASTBIO, host university and/or host organisation, in accordance with milestones and deadlines set out in the 'PIPS Student Guide';
- engage with your PIPS provider in a professional manner, when you are developing your PIPS project;
- carry out and complete a PIPS of suitable length and scope whilst adopting a professional behaviour in the host organisation;
- report on the outcomes of your PIPS to both EASTBIO and BBSRC according to the requirements set out in the 'PIPS Student Guide'.

There are four mandatory forms/documents to be filled in and returned to EASTBIO for approval:

- PIPS Student Planning Sheet (FORM 1);
- PIPS Internship Agreement (FORM 2A);
- PIPS Host Organisation Feedback (FORM 3);
- PIPS Student Feedback for Website, and optional blog or Case Study, etc.

There are additional mandatory documents to be communicated to BBSRC:

- BBSRC DTP PIPS Placement Report (online), and optional blog or Case Study, etc.

If your PIPS require overseas travel or an expenses application, there are two optional forms to be filled in by you only:

- EASTBIO Abroad Pre-departure Checklist (FORM 2B for overseas PIPS) and
- PIPS Additional Expenses Application (FORM 2C - optional).

All forms and documentation necessary for your PIPS will be requested from the EASTBIO Doctoral Training and Industry Engagement Manager, Dr Caroline Pope (see list of EASTBIO Contacts).

Industrial CASE Studentships

The EASTBIO training programme has a number of PhD studentships, which are developed as partnerships between academia and industry. These are known as Industrial CASE Studentships or CASE. This type of studentship includes a placement with a non-academic partner doing high quality collaborative research work that is directly related to your research project in one of the areas of science relevant to BBSRC's strategic priorities. The non-academic partner will nominate a relevant person independent of your academic PhD supervisor, who will ensure you receive the appropriate level of management, support, direction and training while working at the non-academic partner.

1. What training is an Industrial CASE student required to complete?

- You must take part in all components of the EASTBIO training programme and are required to complete training in Years 1, 2, 3 and 4. However, you are not required to carry out an additional placement through the PIPS scheme, although this may be possible under certain circumstances. If you do undertake a PIPS, there will be no additional funding to extend the CASE studentship.
- For the placement at the non-academic partner, you will spend between 3 months up to a maximum of 18 months with the non-academic partner. This can be taken in 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 business priorities. An integral component of your placement training is that it provides you with a training experience unavailable at your academic institution. This should include, to give some examples, training in project management, business strategy and finance.

2. What are EASTBIO and the BBSRC expecting from students with regards to Industrial CASE?

We are confident that you will take a proactive approach to working in collaboration with your PhD supervisor to engage with the non-academic partner to deliver your placement project.

The following points summarise what EASTBIO expects from you:

- Prior to starting your Industrial CASE Studentship, please ensure you have read and understood any formal agreement signed between the University and the industrial partner. This contains essential details relevant to your Industrial CASE Studentship in keeping with Research Council UK terms and conditions and outlining agreed Intellectual Property and publication arrangements.
- Deliver the project work of suitable length and scope of your placement whilst adopting a professional behaviour in the non-academic provider carrying out the agreed training package.
- If you require overseas travel for your placement, you must complete the 'EASTBIO Abroad Pre-departure Checklist' prior to commencing work with your non-academic partner. Please download this form from the EASTBIO website or contact the EASTBIO DTP Administrator, if unsure.

Guidance, advice and support are provided to the parties involved in Industrial CASE Studentships from the EASTBIO Doctoral Training and Industry Engagement Manager, Dr Caroline Pope (see list of EASTBIO Contacts).

IV. Year 4 – Consolidation

Transferable Skills

As this is the year you will be working to complete your research and finish your thesis, EASTBIO supports your transition to the start of your professional life by running two transferable skills workshops at two different locations:

- **Making the most of your final year (Edinburgh, 13 November 2019):** this event (mandatory for fourth-year students) provides you with advice and information on how to balance your work, thesis writing and submission with interviews, grant and job applications.
- **Post-graduation skills (St Andrews, 6 March 2020):** this event (mandatory for fourth-year students) provides you with an overview of recruitment processes and advice on CV- and covering letter-writing, job applications and interview skills in the context of a variety of sectors, academic or not.

V. Year 1 to 4 – Annual Symposia

The EASTBIO Annual Symposia are student-led events that are organised by second-year student representatives from all four universities, with help from a member of the EASTBIO academic Management Group and the EASTBIO Administrator. The Symposia are hosted each year by a different partner university and normally take place in early June. Of these, two are Research Symposia and the other two are focused on the Societal and Commercial/Industrial Impact of bioscience research respectively.

The EASTBIO Symposia are an essential part of your training as they provide you with excellent opportunities to present and discuss your research with the wider EASTBIO community, invite the speakers you like to meet, chair sessions, network with a variety of stakeholders and contribute to debates and interactive workshops.

The 2020 EASTBIO Annual Symposium is focused on the Societal Impact of Bioscience Research will be hosted by the **University of St Andrews on 11-12 June**. Supervisors are welcome and invited to attend at least one of the two days. Make sure you check regularly the EASTBIO website for updates, at www.eastscotbiodtp.ac.uk/eastbio-symposia.



7. Feedback on training

One of the aims of the EASTBIO DTP is to share existing training provision across the partnership and develop new training in response to the needs that you, your supervisors and your potential future employers may identify. We will ask you for feedback on existing training and will ask you for input on developing our training further. Please respond to these requests; your opinion is very important to us and helps improve the training components of the programme.

If you cannot find the training you need, please contact your local EASTBIO administrators or the representative of the EASTBIO academic Management Group at your local institution (all EASTBIO contacts at the end of the handbook). They will have a good overview of the training offered across the four partner institutions and through SULSA. You can also contact enquiries@eastscotbiodtp.ac.uk for any query to do with our training or if you would like to access training not earmarked for your cohort.

8. Duty of Care

EASTBIO – the Management Team, our supervisors and EASTBIO administrators – supports all EASTBIO students in terms of researcher and personal development and endorses the UKRI BBSRC Duty of Care pledge as laid out in the two key documents below.

UKRI Statement of Expectations for Postgraduate Training

<https://www.ukri.org/files/legacy/skills/statementofexpectation-revisedseptember2016v2-pdf/>

Concordat to Support the Career Development of Researchers

<https://www.vitae.ac.uk/policy/vitae-concordat-vitae-2011.pdf>

Student Support Services

We recognise that students will face challenges during their PhD programme, whether related to their research or in their personal circumstances. We will be supportive of you in these circumstances and help you to develop resilience and maintain overall wellbeing. Local support can be obtained through relevant services at the institution you are based in. We highlight, below, disability and counselling services in each partner institution, but there are many more services you can identify through these links. If you feel that there are circumstances which are impacting on your EASTBIO training or you need additional advice and support, please inform us by emailing EASTBIO. BBSRC currently provides stipend support for periods of sickness absence of up to 13 weeks within any 12-month period; see the UK Research and Innovation Training Grant Terms and Conditions at www.ukri.org/files/legacy/publications/rcuk-training-grant-guide-pdf/.

Disability services:

www.abdn.ac.uk/infohub/support/support-for-disabled-students-1901.php (Aberdeen)

www.dundee.ac.uk/disabilityservices/ (Dundee)

www.ed.ac.uk/student-disability-service (Edinburgh)

www.st-andrews.ac.uk/students/advice/disabilities/ (St Andrews)

BBSRC stipulation about Disabled students allowance (DSA):

<https://bbsrc.ukri.org/skills/investing-doctoral-training/disabled-students-allowance/>

Counselling services:

www.abdn.ac.uk/infohub/support/counselling-service.php (Aberdeen)

www.ed.ac.uk/counselling-services (Edinburgh)

www.dundee.ac.uk/student-services/counselling/ (Dundee)

www.st-andrews.ac.uk/staff/wellbeing/community/health/mental/counselling/ (St Andrews)

Get involved!

EASTBIO News

If you have any publications, scientific presentations, an interesting knowledge exchange or outreach experience, please email enquiries@eastscotbiodtp.ac.uk or Tweet to [@EastbioDTP](https://twitter.com/EastbioDTP). We will be happy to publicise your news on our website.

PhD Students

There are many ways in which you can engage more closely with EASTBIO and contribute to building a vibrant cross-institutional student network. You can enhance your leadership skills and volunteer as a *student representative*; you can join the *student communication group* and collect information for our News web page; you can also tweet about the EASTBIO training events or blog about them on the EASTBIO website.

We are looking for student representatives for the 2019 student cohort from each of the four partner universities. As a student representative you will join our student committee and will have the opportunity to (1) get first-hand experience in organising the EASTBIO Symposia and Student Retreats; (2) attend the EASTBIO Management Group meetings and shape training developments; (3) collect the feedback and opinions of your fellow students; (4) organise local social events.

We will ask for volunteers at the Induction Day and offer 10 (training) points as an incentive-booster!

If you would like to represent your university or contribute in any other way, please send an email to Maria Filippakopoulou at enquiries@eastscotbiodtp.ac.uk



Student profiles

In the first year, you will be asked to create your personal profile for the EASTBIO website, which provides brief information about your background and your research project. This information helps other EASTBIO students and the wider scientific and non-scientific community to find out who you are and what your research is about.

To see the current cohort profiles go to:

<http://www.eastscotbiodtp.ac.uk/eastbio-student-cohort-2018>.

For our Privacy Notice, please visit www.eastscotbiodtp.ac.uk/.

EASTBIO on LinkedIn

With four cohorts of EASTBIO students having now successfully completed their PhDs, we have set up '**EastBio Alumni/ae**', a closed LinkedIn group to enable everyone who wishes to keep in touch. We ask you to consider joining the group and thus help us keep in touch beyond graduation.

EASTBIO website

We want our website to be highly interactive. We are keen for you to contribute to it by blogging or engaging with the online forum. For login access and further details, please email enquiries@eastscotbiodtp.ac.uk.

PhD supervisors

We expect that your supervisors will not only actively support your research and development throughout your PhD, but also contribute to the training of the EASTBIO student cohorts by (1) contributing to the thematic groups training; (2) attending the EASTBIO Annual Symposia and providing feedback to students during poster sessions, presentations and talks; (3) hosting EASTBIO students from other institutions in their laboratories if there is a need for these students to acquire specific expertise and (4) engaging with the EASTBIO Management Group in reviewing our training programme. We monitor the engagement of supervisors with the EASTBIO programme and those who fail to engage will be discouraged from taking on the supervision of new EASTBIO PhD students.



EASTBIO Contacts

All the people below are very happy to be contacted with any queries you have about EASTBIO, so please do get in touch!

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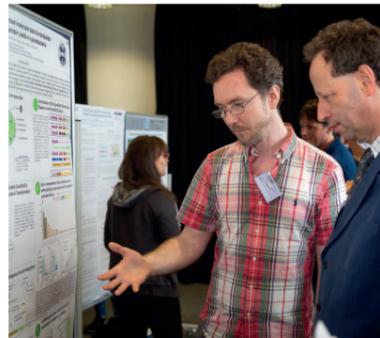
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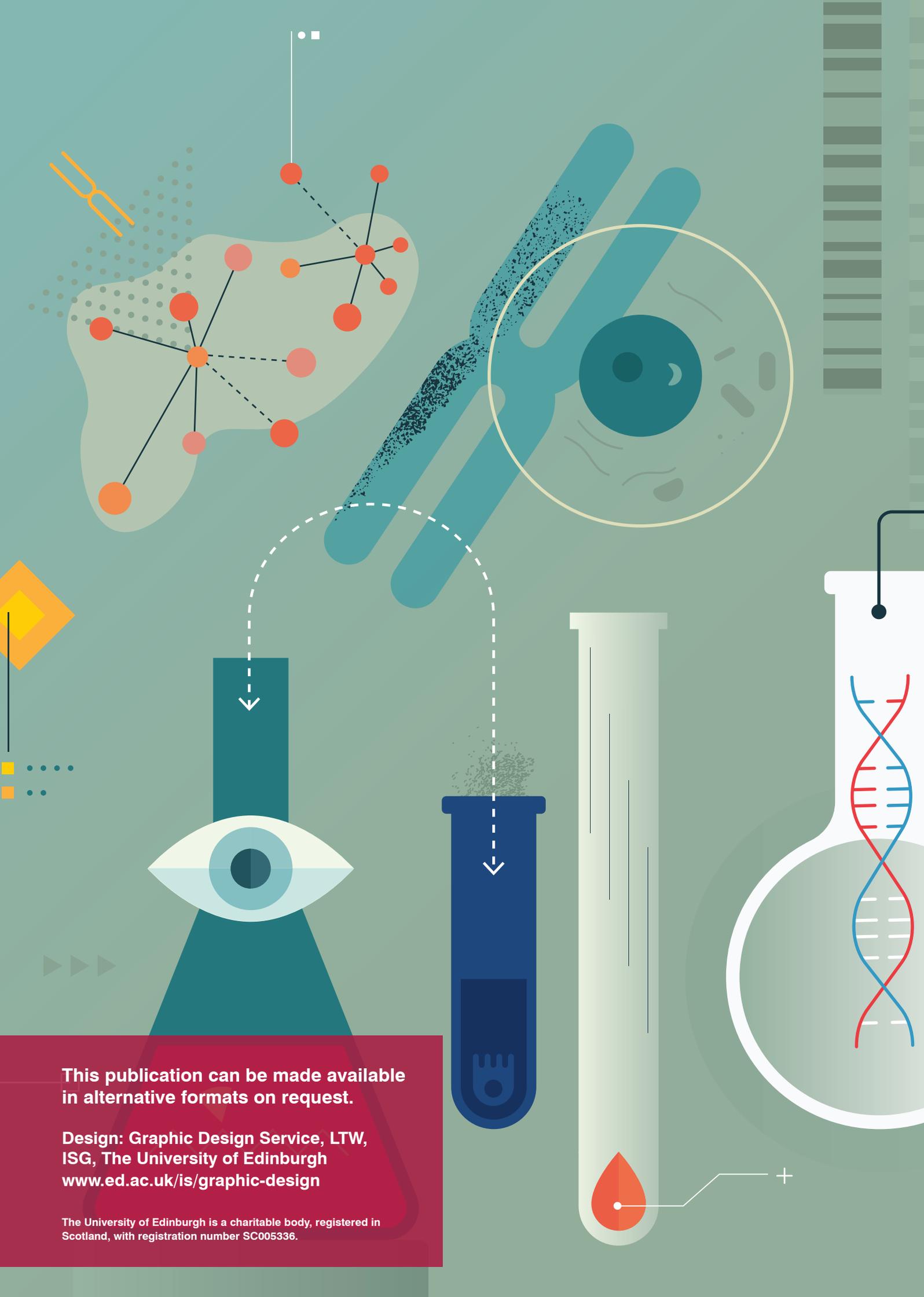
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Photos from various recent EASTBIO Training events.

Disclaimer: Every effort has been made to ensure that the information contained within this Handbook is correct at the time of publication. EASTBIO training courses are subject to ongoing development which could necessitate cancellation of, or alteration to, the advertised courses. The EASTBIO DTP reserves the right to make changes at any time without prior notice. Should you notice any errors or inaccuracies in this Handbook or on our website, please let us know by emailing enquiries@eastscotbioldtp.ac.uk.



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in alternative formats on request.**

**Design: Graphic Design Service, LTW,
ISG, The University of Edinburgh
www.ed.ac.uk/is/graphic-design**

**The University of Edinburgh is a charitable body, registered in
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