# BBSRC EASTBIO

Doctoral Training Partnership







## **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). 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 sixth cohort of 43 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)

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# Welcome from the EASTBIO Academic Management Group

Dear PhD students,

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 record each year 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' hesitate to contact us (contact details are provided at the end of this Handbook).

We look forward to meeting you in person at our Induction Day, which is hosted by the University of Dundee on **Thursday the 5th of October 2017** at the West Park Conference Centre. The induction day will be followed by a masterclass on Statistics and Experimental Design on **Friday the 6th of October 2017**. You will meet the other new EASTBIO students and supervisors at this induction and networking event.

We wish you an excellent start to your studies.

The EASTBIO Academic Management Group



**Professor Clare Blackburn**EASTBIO Director, University of Edinburgh, College of Science & Engineering





Professor Bernadette Connolly

EASTBIO Deputy Director, University of Aberdeen





**Dr Rafael Guimaraes da Silva**University of St Andrews



**Dr Edgar Huitema**University of Dundee

St Andrews





University of Edinburgh, College of Medicine & Veterinary Medicine



## **EASTBIO Training Programme**

## 1. Introduction

The EASTBIO training programme is aligned with the Vitae Researcher Development Framework and aims to support your professional and personal development throughout the four years of your PhD. As an EASTBIO 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

To be successful in your future career you also have to develop a range of personal skills such as effective communication, leadership and initiative. 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,

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

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** 

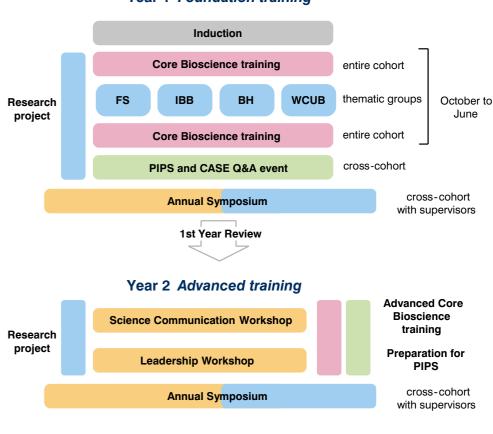
**Year 3: Professional Training** 

**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

#### Year 1 Foundation training



#### Year 3 Professional training



#### **Year 4 Consolidation**



Professional skills Core bioscence skills Research skills Transferable skills

## 2. Overview

We recognise that each of you will start the EASTBIO PhD programme with different abilities 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) and 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 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 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 & Entrepreneurship' 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 Training Plan and Record but does not carry any training credit points (see section 3, below). However, attendance to EASTBIO-specific transferable skills training workshops is mandatory for all second-year students. If you are unable to attend such training, you should contact the EASTBIO Administrator and propose alternative options you commit to undertake.

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 and the Annual Symposia. Finally, EASTBIO will provide funding and support for a **third-year Student Retreat** (**Firbush, 11-13 April 2018**) and will help you organise specific retreat activities. The aim is to allow you to focus on specific aspects of the EASTBIO training, discuss and provide us with detailed feedback and suggestions for future improvement; more details below (see page 14).

#### 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 before the end of August 2021. To help you with taking the next step in your professional career, EASTBIO will hold two workshops on 'Making the most of your final year' and on 'PhD Career Paths' for all final year students (attendance mandatory).

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

Online Training Plan and Record form: https://goo.gl/forms/CCDtRDsykrWH18fb2.

Key deadlines for Year 1:

**16 October 2017:** Training Plan, with choice of Masterclasses, due (please note that you can update the Training Plan form at any point after submission).

31 May 2018: Online Training Plan and Record update due.

The following table summarizes the EASTBIO Training Programme in terms of the mandatory components associated with 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.

## 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 & Entrepreneurship Workshop	2	Mandatory (no points)
Residential Student Retreat	3	Mandatory (no points)
Making the Most of your Final Year Workshop	4	Mandatory (no points)
PhD Career Paths Workshop	4	Mandatory (no points)
Other training (non-EASTBIO)		Optional (no points) – To be recorded on online student Training Plan and Record



In Year 1, you should assess your training requirements and complete your online 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. The online Training Plan and Record form is available at the following link: https://goo.gl/forms/CCDtRDsykrWH18fb2.

All first-year students must finalise their choice of masterclasses and the rest of their first year training plan by **Monday the 16 October 2017**. On submitting the form, **please save the link provided on the final submission confirmation page**, as you will need this link to edit your plan in the future.

You must update your Training Record at the end of your first year by the **31 May 2018**. Please record both EASTBIO and local training that you attend. It is your responsibility to ensure that all your training documents are up to date and submitted on time. Please remember that progression to the second year of your PhD depends on whether or not you have fulfilled the EASTBIO training requirements.

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

## 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:

- 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.
- 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. 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'.

## 6. Year-by-year Training

#### I. Year 1: Foundation Training

a. Research Skills Subject-specific Theoretical Training

EASTBIO student projects starting in 2017 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 5th of October.

During this training, you will take part in **4 face-to-face meetings** taking place every two months (starting from December 2017) at different locations across the partnership. These meetings will be based on group discussions, interactive presentations and literature review aiming to introduce challenges, questions and tools that are key in your theme-specific research area and to develop your critical reading skills. The thematic groups will also provide you with an excellent opportunity to get to know 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. For examples of thematic group training activities from past years, please visit the EASTBIO website: **www.eastscotbiodtp.ac.uk/research-skills-training**.

Schedules of thematic group meetings and additional materials that will help you prepare will be posted on the EASTBIO website and regularly updated throughout Year 1.

#### b. Foundation Masterclasses

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

- Statistics and Experimental Design (6 October 2017)
- Dynamic Modelling for Systems Biology (3 November 2017)
- Introduction to MATLAB (12 January 2018)
- Imaging (26 January 2018)
- Proteomics and Mass Spectroscopy (spring date TBA)
- Primer for Synthetic Biology (spring date TBA)
- Genomic Approaches (spring date TBA)

All masterclasses will be held in Dundee. Details, summary outlines and updates can be found 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 Record. However, EASTBIO trains 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 EASTBIO.

**Presentation Skills Workshop:** this workshop is for *first and 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. It is funded by the BBSRC as a powerful training platform for members of its research community.

In 2017-2018, EASTBIO offers a total of 6 funded spaces worth £800 each to first-year students on a competitive basis. You will be invited to apply after the Induction Day and will be given information to this effect. If you are successful, you will have 2 years to complete the course and gain either 30 points for Module I, or 50 points for both Module I & II. Failure to complete the course may carry a financial sanction.

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:** Locations UoE, UoD and UoA. Advanced practical courses in light, confocal and 2-photon microscopy. In addition, the Edinburgh Super Resolution Imaging Consortium (ESRIC) runs a summer school in Super-Resolution imaging techniques, which is open to all EASTBIO students.
- **Genetic Engineering and Genome analysis:** Location UoE. This is a 2-week practical course for PhD students in advanced genetic engineering of mammalian cells. The course runs every year in December.
- **Proteomics and protein purification:** Locations UoE. A SULSA-supported practical course in protein expression, purification and characterisation, including an array of biophysical analysis techniques is available twice a year at the Protein Purification Facility (PPF).
- **Protein crystallography:** Location UoStA. A one-week summer school in Protein Crystallography is held every year.
- Mass spectrometry: Location UoE. A practical 2-part course in preparation and analyses of protein samples for a variety of mass spectrometry applications is available twice a year.
- **Flow cytometry:** Location UoA, UoD, UoE. Courses covering the theoretical basis and practical application of flow cytometry, instrumentation, data analyses and presentation.

The research training provided by EASTBIO will supplement the training 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. 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

- Science Communication Workshop (Aberdeen, date TBA): this event is for second-year students. It
  focuses on developing the skills you need to communicate your research effectively to scientific and nonscientific audiences.
- Leadership and Entrepreneurship Workshop (Dundee, 16 November 2017): this event is for second-year students and it focuses on different aspects of leadership and entrepreneurship.

#### **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, 11-13 April 2018)**: this is a student-led event for *third-year students*. In a three-day residential retreat you will have the opportunity to meet other EASTBIO students and share your research and experience as a PhD student. In particular, EASTBIO will provide funding and support to student representatives to organise the retreat at the **Firbush Point Outdoor Centre**, located on the shores of Loch Tay near Killin, Scotland. During the retreat we expect you to discuss your science, your future career plans and how you will stay in touch with EASTBIO and each other after you finish your PhD. The students planning this event will be asked to decide on a specific topic to do with the EASTBIO training, and use the retreat to either discuss the training impacts and/or provide suggestions for improving it in future. EASTBIO will offer additional support for these retreats should you decide to invite speakers or run a specific transferable skills workshop. The retreat will also give you an ample chance to relax and have fun with outdoor activities. For an example of last year's retreat, please visit the EASTBIO website at **www.eastscotbiodtp.ac.uk/year-3-professional-training**.

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/schools-departments/sport-exercise/outdoor-centre/about-us/introduction-firbush** and have a look at the Firbush virtual tour.



## 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 exception to this requirement is of 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 Q&A event (9 February 2018 TBC, Dundee - Year 1)

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?

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, 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 behavior 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);
- Case Study.

There are additional mandatory documents to be communicated to BBSRC:

- BBSRC DTP PIPS Placement Report (online), and
- · Case Study.

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).

## 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 iCASE. 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 training in
  project management, business strategy and finance, to give some examples.

## 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 work 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 behavior 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 Predeparture Checklist' prior to commencing work with your non-academic partner. Please download this form from the EASTBIO website or contact the EASTBIO administrator if unsure.

Guidance, advice and support are provided to the parties involved in Industrial CASE Studentships by Dr Caroline Pope, **email:** dtp@sulsa.ac.uk

## 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:

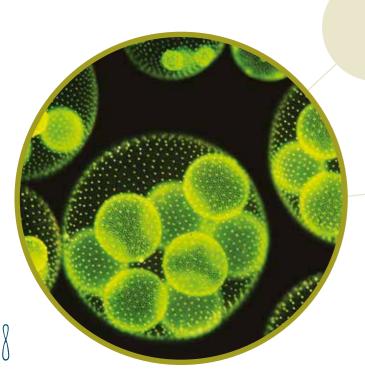
- Making the Most of your Final Year (Edinburgh, 3 November 2017): this event is for *fourth-year* students. It will provide you with advice and information on how to balance your work, thesis writing and submission with interviews, grant and job applications.
- PhD Career Paths Workshop (St Andrews, 9 March 2018): this event is for *fourth-year students*. It will provide an overview of your career opportunities both within and outwith academia.

## 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 mid-June. Of these, two are *Research Symposia* and the other two are focused on the Societal and *Commercial Impact* of bioscience research respectively.

The EASTBIO Symposia are an **essential part of your training** and provide you with excellent opportunities to present and discuss your research with the wider EASTBIO community, invite the speakers you like to hear, chair sessions and contribute to debates and discussions.

The next EASTBIO Annual Symposium will be hosted by the University of Edinburgh on **the 4th-5th June 2018 (TBC)**. Make sure you check regularly the EASTBIO website, at **www.eastscotbiodtp.ac.uk/eastbio-symposia** for updates.





## 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 strands 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. 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**.



## **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**. 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 2018 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 developments in training; (3) collect the feedback and opinions of your fellow students; (4) organise social events.

We will ask for volunteers at the Induction Day.

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: www.eastscotbiodtp.ac.uk/eastbio-student-cohort-2016.

#### **EASTBIO** on LinkedIn

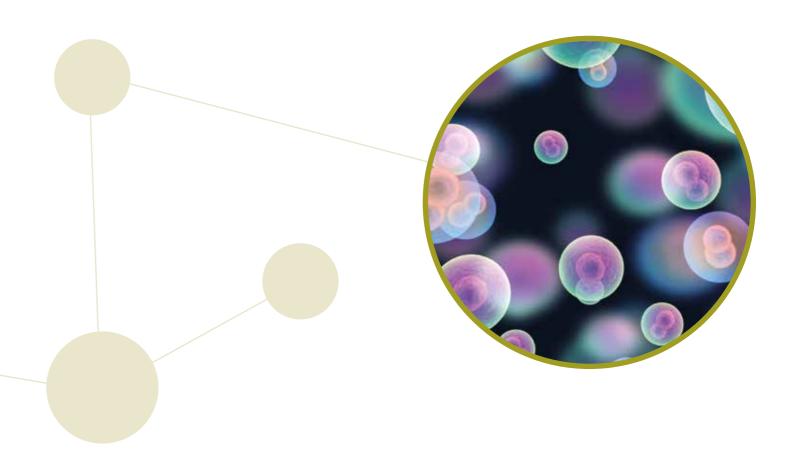
As the second cohort of EASTBIO students has now completed their PhD studies, we have set up 'EastBio Alumni', a closed LinkedIn group to enable everyone to keep in touch. We ask you to consider joining the group and thus help us keep in touch beyond graduation.

#### **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 Maria Filippakopoulou at 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 and talks; (3) hosting EASTBIO students from other institutions in their laboratories if there is a need for these students to acquire specific expertise. 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!

#### **EASTBIO Administrator**

#### Dr Maria Filippakopoulou

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**Email:** enquiries@ eastscotbiodtp.ac.uk

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#### **Postgraduate Placement** Coordinator

#### **Dr Caroline Pope**

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#### **Rosie Barraclough**

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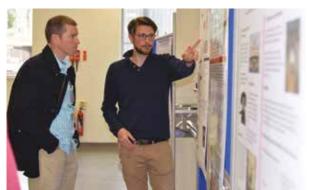
#### Selma Gulyurtlu [2015]

University of St Andrews

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## EASTBIO Symposium 2017, University of Aberdeen











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@eastscotbiodtp.ac.uk**.



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