

**Enhancing science & innovation capacity of Vietnam for sustainable development**

**Handover training programme**

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This document outlines the details of the training that will be designed, prepared and delivered by a set of selected Vietnamese trainers during two workshops to be held in Vietnam in December 2019.

### **1. Aim and objectives of the training**

Before delivering the training the trainers need to familiarise themselves with the aims and objectives of this training course to ensure that the materials they prepare and deliver are aligned with these.

| <b>Aim of training</b>  |
|---|
| Increase researchers' knowledge, capability and skills related to increasing the quality, outputs and impact from their research and working more frequently and effectively with enterprises, businesses and other research organisations. |

| <b>Objectives of training</b>  |
|--|
| <ul style="list-style-type: none"><li>▪ Research quality indicators—To enable researchers to measure the quality and effectiveness of their research and research outputs</li><li>▪ Writing and publishing in high quality journals—To provide researchers with the skills required to publish in high quality journals</li><li>▪ Research project management—To provide researchers with the skills to manage research projects effectively</li><li>▪ Knowledge transfer and working with business—To enable researchers to work effectively with businesses</li><li>▪ Communicating with confidence and 3MT—To provide researchers with the skills and knowledge required to communicate their research effectively to a wide audience, using a wide range of mediums</li><li>▪ Research Impact—To provide researchers with an understanding of how to generate impact from their research and why it is important</li><li>▪ Bidding and winning—To provide researchers with the skills to identify, apply for and secure funding for their research</li><li>▪ Intellectual property—To provide researchers with an understanding of intellectual property and why it is important to protect it</li><li>▪ Career development and action planning—To enable researchers to plan for their career development</li></ul> |

### **2. Logistical details of the training**

|                                 |  |
|---------------------------------|--|
| <b>Dates of training</b>        | 2 <sup>nd</sup> December – 13 <sup>th</sup> December 2019  |
| <b>Locations of training</b>    | Ha Noi (2 <sup>nd</sup> – 6 <sup>th</sup> Dec) and Ho Chi Minh City (9 <sup>th</sup> – 13 <sup>th</sup> Dec) |
| <b>Training course duration</b> | 5 days at each location  |
| <b>Day schedule</b>             | 9 am until 5 pm with a 1.5 hour lunch break  |
| <b>Participants</b>             | 30   |

### **3. Overview of the modules to be included in training**

The training programme consists of 8 key modules that are focussed on achieving the project aims and objectives that fall under academic research excellence and transferable researcher skills. The modules are designed to ensure that the participants of the training have a thorough knowledge, understanding and practice of the skills and qualities to become excellent researchers. There are 3 general modules that aim to increase the participants' understanding of the project and training as a whole. Each of the modules are independently delivered yet are interlinked and depend upon one another.

| <b>Category of training</b>           | <b>Modules included</b>  |
|---------------------------------------|--|
| <b>General training</b>               | <ul style="list-style-type: none"> <li>▪ Workshop opening and general context</li> <li>▪ World Café</li> <li>▪ Career Development and Action planning</li> </ul>   |
| <b>Academic Research Excellence</b>   | <ul style="list-style-type: none"> <li>▪ Research Quality: 5 Ps and Originality Significance and Rigour</li> <li>▪ Research Impact</li> <li>▪ Writing and publishing in high quality journals</li> </ul>   |
| <b>Transferable Researcher Skills</b> | <ul style="list-style-type: none"> <li>▪ Research project Management</li> <li>▪ Research Communication</li> <li>▪ Intellectual Property</li> <li>▪ Knowledge Transfer and working with business</li> <li>▪ Bidding and winning; costing and pricing</li> </ul> |

#### 4. Suggested timetable for the 5-day training programme

|               | Monday                       |                            | Tuesday   |                          | Wednesday   |                            | Thursday                                  |                          | Friday                                 |                         |
|---------------|------------------------------|----------------------------|---|--------------------------|---|----------------------------|---|--------------------------|--|-------------------------|
| 09:00 – 10:30 | <b>RDF</b>                   |                            | <b>Research Impact (2)</b>                          |                          | <b>Three Minutes Thesis (3MT) presentations (30 participants)</b> |                            | <b>Research project management (1)</b>    |                          | <b>Research career Development (1)</b> |                         |
|               | Hanoi trainers<br>Dr Huy     | HCMC trainers<br>Dr Huy    | Hanoi trainers<br>Dr Tăng                           | HCMC trainers<br>Dr Hiệp | Hanoi trainers<br>Ms Q Anh  | HCMC trainers<br>Dr Hiệp   | Hanoi trainers<br>Ms Phương/Dr Trang      | HCMC trainers<br>Dr Hiệp | Hanoi trainers<br>Dr Tú / Ms Hương     | HCMC trainers<br>Dr Huy |
| 10:30 – 10:50 | COFFEE BREAK (20 minutes)    |                            |   |                          |   |                            |   |                          |  |                         |
| 10:50 – 12:00 | <b>Research quality (1)</b>  |                            | <b>Research Impact (3)</b>                          |                          | <b>Three Minute Thesis continued</b>                              |                            | <b>Research project management (2)</b>    |                          | <b>Career development (2)</b>          |                         |
|               | Hanoi trainers<br>Dr Thuận   | HCMC trainers<br>Dr Phương | Hanoi trainers<br>Dr Tăng                           | HCMC trainers<br>Dr Hiệp | <b>11.30 Writing and Publishing in high quality journals (1)</b>  |                            | Hanoi trainers<br>Ms Phương/Dr Trang      | HCMC trainers<br>Dr Hiệp | Hanoi trainers<br>Dr Tú / Ms Hương     | HCMC trainers<br>Dr Huy |
|               |                              |                            |   |                          | Hanoi trainers<br>Dr An   | HCMC trainers<br>Dr Lâm    |   |                          |  |                         |
| 12:00 – 13:30 | LUNCH (1.5 hours)            |                            |   |                          |   |                            |   |                          |  |                         |
| 13:30 – 15:00 | <b>Research quality (2)</b>  |                            | <b>Research communication</b>                       |                          | <b>Writing and Publishing in high quality journals (2)</b>        |                            | <b>Research proposals and bidding (1)</b> |                          | <b>World Café</b>                      |                         |
|               | Hanoi trainers<br>Dr Thuận   | HCMC trainers<br>Dr Phương | Hanoi trainers<br>Mr Linh                           | HCMC trainers<br>Dr Hiệp | Hanoi trainers<br>Dr An   | HCMC trainers<br>Dr Lâm    | Hanoi trainers<br>Dr Quang                | HCMC trainers<br>Dr Lâm  | Hanoi trainers<br>Mr Toàn              | HCMC trainers<br>Dr Huy |
| 15:00 – 15:20 | COFFEE BREAK (20 minutes)    |                            |   |                          |   |                            |   |                          |  |                         |
| 15:20 – 16:30 | <b>Research Impact (1)</b>   |                            | <b>Knowledge transfer and working with business</b> |                          | <b>Intellectual Property</b>                                      |                            | <b>Research proposals and bidding (2)</b> |                          | <b>Workshop closing</b>                |                         |
|               | Hanoi trainers<br>Dr Tăng    | HCMC trainers<br>Dr Hiệp   | Hanoi trainers<br>Dr Hồng                           | HCMC trainers<br>Dr Hiệp | Hanoi trainers<br>Dr Hà   | HCMC trainers<br>Dr Phương | Hanoi trainers<br>Dr Quang                | HCMC trainers<br>Dr Lâm  |  |                         |
| 16:30         | CLOSE                        |                            |   |                          |   |                            |   |                          |  |                         |
|               | Homework 1: Abstract writing |                            | Homework 2: 3MT preparation                         |                          |   |                            |   |                          |  |                         |

#### Researcher Development Framework Domains

|   |                               |   |   |
|---|-------------------------------|---|---|
| <b>Knowledge and intellectual abilities</b> | <b>Personal Effectiveness</b> | <b>Research Governance and Organisation</b> | <b>Engagement, influence and impact</b> |
|---|-------------------------------|---|---|

## 5. Details for each module

The Vietnamese trainers of these courses are free to design, prepare and deliver their modules accordingly, using the materials (slides, handouts, activities) provided by the UK consultants. However, the trainers will need to use the following information for each of the modules to ensure that the material is suitable. Outlined below are the following for each module:

|   |  |
|---|--|
| <b>Learning Objectives</b>                      | These are the key learning objectives for the module and by the end of the module delivery all participants should have achieved these   |
| <b>Key elements</b>                             | These are the key aspects of the module, the main sub topics that should be covered to ensure that the overall module is delivered successfully                                    |
| <b>Key messages</b>                             | These are the key messages related to the module that need to be imparted on the trainees through the delivery of the module   |
| <b>Why this is important</b>                    | This outlines why it is important that trainees learn and understand the material in this module – why it is important to them and how this links to the Vitae RDF                 |
| <b>Other modules this module is linked with</b> | This shows how this module links with other modules in the training. As there will need to be reference in how these are all drawn together into the training programme as a whole |

### 5.1 General training

#### 5.1.1 Opening session and context setting

This module sets the scene for the whole training by outlining what the overall project is trying to achieve. The training objectives will be outlined. It is an opportunity for the trainers to ensure that the participants are clear what is expected of them and what they can expect from the trainers. The Vitae RDF should also be introduced in this session to provide the framework for the training as a whole.

| Learning Objectives   | Key Elements  |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Participants understand the purpose of the project and the purpose, structure and delivery of training</li> <li>▪ Participants have an understanding of the Vitae RDF</li> </ul> | <ul style="list-style-type: none"> <li>▪ Introduction into the background of the project</li> <li>▪ Overview of the training that will be delivered</li> <li>▪ Overview of the Vitae RDF</li> </ul> |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>Trainers and Participants are familiar with one another</li> <li>Participants are clear about the expectations of them and the trainers</li> </ul>  | <ul style="list-style-type: none"> <li>Expectations for the trainees and trainers</li> </ul>  |
| <b>Key Messages</b>  | <b>Why this is important</b>  |
| <ul style="list-style-type: none"> <li>Why this training is important</li> <li>Why they are being trained in this</li> <li>What is expected of them</li> <li>Understand the background, context, purpose and framework for the training</li> </ul> | <ul style="list-style-type: none"> <li>This module sets the context for the whole training and allows participants to understand the purpose</li> <li>It makes it clear to the participants what to expect from the week and what the expectations are of them</li> <li>It provides the framework that underpins all of the training modules</li> </ul> |

|   |
|---|
| <b>Other modules this topic is linked with</b>  |
| ALL – this provides the context and foundation for all of the modules that will be delivered in the training programme. |

### 5.1.2 World Café

This is the final module that is run in the training. It is an interactive and reflective session designed to consolidate the learning from the week.

|   |  |
|---|--|
| <b>Learning Objectives</b>  | <b>Key Elements</b>  |
| <ul style="list-style-type: none"> <li>Participants consolidate their learning from the past week and learn from one another</li> </ul> | <ul style="list-style-type: none"> <li>World café session</li> </ul>   |
| <b>Key Messages</b>   | <b>Why this is important</b>   |
| <ul style="list-style-type: none"> <li>Review and reflection of the material covered in the training week</li> </ul>                    | <ul style="list-style-type: none"> <li>This module consolidates all of the learning from the whole training course</li> <li>It is an energetic interactive and fun way to summarise the learning achieved by the participants</li> </ul> |

|   |
|---|
| <b>Other modules this module is linked with</b> |
|---|



ALL – this module consolidates all of the learning from the whole week and is used as a method to help the participants reflect on their learning. All topics from the week should be covered where possible. This module encourages individual reflection and peer to peer learning.

### 5.1.3 Career Development and Action Planning

This module is designed to encourage researchers to take charge of their career development and understand why it is important to have a career development plan and to make action plans to be implemented following the training.

| Learning Objectives   | Key Elements  |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Participants will know why it is important to have a career plan</li> <li>▪ Participants will understand how career development links back to the 5 Ps and OSR</li> <li>▪ Participants will understand the importance of and how to work with others to develop their career</li> <li>▪ Participants will know how to promote themselves</li> <li>▪ Participants will develop an action plan</li> </ul>                    | <ul style="list-style-type: none"> <li>▪ Research career planning</li> <li>▪ Why plan and what plans should look like</li> <li>▪ Career development and the 5 Ps and OSR</li> <li>▪ Why mentors are important</li> <li>▪ Working towards Professorship</li> <li>▪ Developing a personal research strategy</li> <li>▪ Promoting yourself as a researcher</li> <li>▪ Collaborators</li> <li>▪ Action planning</li> </ul>  |
| Key Messages  | Why this is important   |
| <ul style="list-style-type: none"> <li>▪ Career development is key to ensure researchers progress in their careers</li> <li>▪ Career development is a personal journey that requires planning, dedication and commitment</li> <li>▪ You need to promote yourself as a researcher</li> <li>▪ You need to collaborate to develop in your career</li> <li>▪ Career development links back to the 5 Ps and OSR and how you can achieve and demonstrate these</li> </ul> | <p><b>Personal Effectiveness: The personal qualities to become an effective researcher</b></p> <ul style="list-style-type: none"> <li>▪ Establishing clear career development plans linked to goals results in researchers progressing in their career</li> <li>▪ The development of individual researchers benefits the individual researchers but also their institutions and ultimately Vietnam</li> <li>▪ As individuals develop they can also help others develop and provide</li> </ul> |

|  |  |
|--|--|
|  | <p>mentorship and leadership to others in their institution</p> <ul style="list-style-type: none"> <li>▪ Developing researchers results in higher quality research and achieving OSR and 5 Ps</li> <li>▪ Understanding where a researcher sits within their research context means they are able to influence their field</li> </ul> |
|--|--|

|  |
|--|
| <b>Other modules this topic is linked with</b>                     |
| This module is linked to all of the other modules in the training. |

## 5.2 Academic Research Excellence modules

### 5.2.1 Research Quality: 5 Ps and Originality Significance and Rigour

This is one of the key modules of the training. It outlines the indicators that demonstrate high quality research. All trainees should understand the concepts of Originality, Significance and Rigour to deliver high quality research. This module also introduces the concept of the 5 'P's (Prestige, PhDs, Publications, Public Profile, Pounds) that also underpin the other modules in this training,

| Learning Objectives  | Key Elements   |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Participants will understand what Research Quality indicators are and why they are important</li> <li>▪ Participants will know what Originality, Significance and Rigour mean and how these can be applied to their work</li> <li>▪ Participants will understand the 5 'P's and how these relate to research quality</li> </ul> | <ul style="list-style-type: none"> <li>▪ Defining and understanding research quality</li> <li>▪ Why we need Research Quality indicators</li> <li>▪ Outlining the 5 'P's</li> <li>▪ Definitions of O, S and R as quality indicators</li> <li>▪ Recognising OSR in your work and others</li> <li>▪ Peering and reviewing</li> <li>▪ Validation frameworks – REF</li> </ul> |
| Key Messages   | Why this is important  |
|  | <p><b>Knowledge and intellectual abilities:</b><br/>The knowledge, intellectual abilities and techniques to do research</p>  |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Understanding and demonstrating OSR in research is fundamental to producing high quality research</li> <li>▪ The 5 'P's are a key indicator of research quality and all researchers should be aware of these</li> <li>▪ Being able to recognise OSR in research is an important skill</li> <li>▪ Understanding the REF framework helps understand the importance of OSR in research</li> </ul> | <ul style="list-style-type: none"> <li>▪ Understanding the importance of undertaking OSR research is fundamental to understanding how to produce high quality research</li> <li>▪ Producing high quality research increases the chances of publishing in high quality journals, obtaining funding from research, increasing the likelihood of impact from research and increases the opportunity for collaborations.</li> </ul> |
|---|---|

**Other modules this module is linked with:**

- All other modules – OSR underpins all of the training that is being delivered in this course
- Being able to undertake research that is recognised of being high quality increases your profile and prestige as a researcher.
- Knowledge transfer and working with business: Producing high quality research increases the opportunity to collaborate with others both within and outside of academia.
- IP: When working with businesses understanding your IP rights will help increase the ability to utilise the outputs of your high quality research
- Impact: Producing high quality research and increasing collaborations increases the likelihood of achieving impact from your research.
- Bidding and Winning: Demonstrating high quality research is an important aspect when applying for external research funding.
- Research project Management: Being able to manage research projects effectively increases the chances that you will produce high quality research
- Research Communication: Being able to communicate about your research increases the research and significance of your research as well as impacting your profile and prestige.

**5.2.2 Research Impact**

This module outlines what research impact is and why it is important. It outlines the different types of impact a researcher can have and how they can achieve impact from their research. It also explores who researchers can work with to maximise the impact from their research.

|                            |                     |
|----------------------------|---------------------|
| <b>Learning Objectives</b> | <b>Key Elements</b> |
|----------------------------|---------------------|

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Participants will understand what research impact is and why it is important</li> <li>▪ Participants will know the different types of impact that research can have</li> <li>▪ Participants will be able to differentiate between, the pathways to impact and the impact achieved</li> <li>▪ Participants will know why it is important to work with others to achieve impact</li> <li>▪ Participant will know how to measure and capture impact in their projects</li> </ul> | <ul style="list-style-type: none"> <li>▪ What research impact is and why it is important</li> <li>▪ What activities are required to achieve impact</li> <li>▪ What are the different types and levels of impact</li> <li>▪ UK context for research impact –REF and Research Councils</li> <li>▪ Example of impact in UK REF case study</li> <li>▪ Example of impact in Vietnam</li> <li>▪ Working with others to achieve impact</li> <li>▪ Planning, capturing and measuring impact</li> </ul>   |
| <b>Key Messages</b>  | <b>Why this is important</b>   |
| <ul style="list-style-type: none"> <li>▪ Research impact is important</li> <li>▪ Impact can be achieved in any different ways</li> <li>▪ Impact is greater when working with others</li> <li>▪ Impact needs to be planned</li> </ul>   | <p><b>Engagement, influence and impact: The knowledge and skills to work with others to ensure the wider impact of research</b></p> <ul style="list-style-type: none"> <li>▪ Achieving impact from research increases researchers’ profile and prestige</li> <li>▪ Funders like to see that the research they are funding is having an impact in the real world</li> <li>▪ Working with others broadens the scope of your research</li> <li>▪ Achieving impact from research means that the research makes a difference and benefits society</li> <li>▪ Gives the researchers a sense of satisfaction</li> </ul> |

**Other modules this module is linked with**

- OSR – Impact is inherently linked with OSR – this is because if you are undertaking research of a high quality you are more likely to have an impact from that research
- Research communication – Being able to communicate about your research effectively to a range of audiences increases the chance of you achieving an impact from your research
- Knowledge transfer and working with business: Working and collaborating with businesses increases the chance of achieving impact from your research
- Bidding and winning: Being able to demonstrate the impact that your research will have or has had will influence whether funders want to fund your research.

### 5.2.3 Writing and publishing in high quality journals

This module aims to ensure researchers are aware of why it is important to write well and also provides them with some tips and tricks to write well. It covers how to write good abstracts, how to use graphs and diagrams well and the importance of proof reading. This links back to the P of Publishing/Papers – being able to produce high quality journal articles that are published in high quality journal papers.

| Learning Objectives  | Key Elements   |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Participants will understand the importance of writing well and having papers published in high quality journals and how this relates back to OSR</li> <li>▪ Participants will have the knowledge of what skills are required to undertake high quality writing</li> <li>▪ Participants will know how to use diagrams and graphs</li> </ul> | <ul style="list-style-type: none"> <li>▪ Why write well?</li> <li>▪ Writing tips: sentence level skills; paragraphs; topic sentences; structure; provocative questions</li> <li>▪ How to write an abstract</li> <li>▪ Diagrams, Graphs</li> <li>▪ Reviewing</li> <li>▪ Proofreading</li> </ul>   |
| Key Messages   | Why this is important  |
| <ul style="list-style-type: none"> <li>▪ Writing well is important to get published in high quality journals</li> <li>▪ You must be able to write well and use diagrams and graphs effectively</li> <li>▪ Proofreading is important</li> </ul>   | <p><b>Engagement, influence and impact: The knowledge and skills to work with others to ensure the wider impact of research</b></p> <ul style="list-style-type: none"> <li>▪ It is important for researchers to get their work in high quality journals</li> <li>▪ This increases their profile in their academic community</li> </ul> |

|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>▪ This increases the opportunity for collaborations</li> <li>▪ Academic impact – influencing and engaging in their field</li> <li>▪ Academics are rated on number of citations they have and the quality of the journals they publish in!</li> </ul> |
|--|---|

| Other modules this module is linked with   |
|--|
| <ul style="list-style-type: none"> <li>• OSR- undertaking high quality research means that you can publish high quality journals</li> <li>• Impact – being able demonstrate impact in journals increases the success of your journal</li> <li>• Research Communication: Being able to write well increases your ability to communicate your research to a range of audience</li> </ul> |

### 5.3 Transferable Researcher Skills

#### 5.3.1 Research project management

Being able to effectively manage and run a research project is an important skill that all researchers must have to ensure that their research projects are a success. This module covers all aspects of project management, including scope, objectives, tasks, risk management, project planning tools and stakeholders. It also covers the important attributes that an effective project manager must demonstrate.

| Learning Objectives   | Key Elements   |
|---|--|
| <ul style="list-style-type: none"> <li>▪ To be able to use project management tools</li> <li>▪ To be able to plan a project effectively</li> <li>▪ To identify and plan project tasks</li> <li>▪ To understand, analyse and manage risk</li> <li>▪ To undertake stakeholder analysis</li> </ul> | <ul style="list-style-type: none"> <li>▪ What a project is</li> <li>▪ Project scope</li> <li>▪ Identifying tasks</li> <li>▪ Project objectives</li> <li>▪ Project planning tools</li> <li>▪ Risk management</li> <li>▪ Stakeholders</li> <li>▪ Project manager skills</li> </ul> |
| Key Messages  | Why this is important  |
| <ul style="list-style-type: none"> <li>▪ Researchers should use project management tools</li> </ul>   | <p><b>Research Governance and Organisation:</b><br/> <b>Knowledge of the professional standards and requirements to do research</b></p>  |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Researchers should properly plan projects</li> <li>▪ When undertaking projects you should consider risk early</li> <li>▪ You should consider your stakeholders</li> <li>▪ Researchers should demonstrate skills to be an effective project manager</li> </ul> | <ul style="list-style-type: none"> <li>▪ Project management underpins all the work that researchers undertake</li> <li>▪ Researchers will always be required to manage projects of various types and sizes</li> <li>▪ Effective project management is important for a researcher’s reputation and helps in attracting future funding and research collaborations</li> <li>▪ Well managed research projects will have a greater capacity for impact</li> </ul> |
|--|---|

| <b>Other modules this module is linked with</b>  |
|--|
| <ul style="list-style-type: none"> <li>• Impact – planning your project and effective project management increases the chance of having an impact from your project (working with stakeholders, communicating your research, planning impact into project plans)</li> <li>• Knowledge transfer and working with business – effective project management skills give businesses confidence you will deliver and therefore more likely to work with you</li> <li>• OSR – being able to manage project effectively increases chance of producing high quality research</li> <li>• Bidding and winning – Project managing funding proposal development and funded research projects is essential.</li> </ul> |

**5.3.2 Research Communication**

Being able to communicate about your research to a variety of audiences is an important skill for all researchers to have. This module outlines the importance of communicating about research, understanding your audience and developing communication plans. The 3-minute thesis is a very important aspect of the overall training programme as it encourages researchers to communicate about their research in a concise and effective way to audiences outside of their discipline. It also gives them the confidence to stand up in front of others and speak about their research.

| <b>Learning Objectives</b>   | <b>Key elements</b>  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ To be able to apply techniques to communicate in a concise, clear,</li> </ul> | <ul style="list-style-type: none"> <li>▪ 3 minute thesis</li> <li>▪ Why communicating research is important</li> </ul> |

|  |   |
|--|---|
| <p>articulate and engaging manner using different techniques</p> <ul style="list-style-type: none"> <li>▪ To understand why communicating about their research is important</li> <li>▪ To know how to develop a communication plan</li> <li>▪ To know the elements of a communication plan</li> <li>▪ To be able to write communication objectives</li> <li>▪ To be able to adapt communication methods according to the audience</li> </ul> | <ul style="list-style-type: none"> <li>▪ Developing a communication plan</li> <li>▪ Communication objectives</li> <li>▪ Understanding your audience</li> </ul>  |
| <b>Key Messages</b>  | <b>Why this is important</b>  |
| <ul style="list-style-type: none"> <li>▪ It is important to be able to clearly communicate about your research to a range of audiences</li> <li>▪ Researchers need to develop and use communication plans</li> <li>▪ You need to outline your communication objectives</li> <li>▪ You need to understand the audience</li> </ul>   | <p><b>Engagement, influence and impact: The knowledge and skills to work with others to ensure the wider impact of research</b></p> <ul style="list-style-type: none"> <li>▪ Researchers need to know how to effectively communicate research to a range of audiences to maximise influence and impact.</li> <li>▪ Communicating effectively is important for attracting research funding.</li> <li>▪ Having a communication plan improves efficiency and effectiveness of communication</li> </ul> |

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| <b>Other modules this module is linked with</b>   |
| <ul style="list-style-type: none"> <li>• Impact – the ability to communicate research effectively increases the potential impact of any research. Without effective research communication and working with others, impact can be difficult to achieve.</li> <li>• OSR – Effective research communication enables the sharing of ideas and best practice leading to an improvement in all aspects of OSR.</li> <li>• Bidding and winning – communication plans and pathways to impact are often required within funding proposals.</li> </ul> |



### 5.3.3 Intellectual Property

It is important that Researchers know what intellectual property is and what their Intellectual Property Rights are. This is important because researchers should retain as much Intellectual Property as possible. When working with others it is important that researchers have the knowledge of what IP is and how to negotiate their rights.

| Learning Objectives  | Key Elements   |
|--|--|
| <ul style="list-style-type: none"> <li>▪ To understand what IP is</li> <li>▪ To understand the difference between background and foreground IP</li> <li>▪ To appreciate the importance of retaining IP ownership</li> <li>▪ To understand what researchers use IP for</li> <li>▪ To understand that different organisations have different reasons for wanting IP ownership</li> <li>▪ To understand how IP will be referred to in research project agreements</li> <li>▪ To have sufficient IP knowledge to negotiate IP arrangements with partners</li> <li>▪ To understand what patents, copyright, design rights and trademarks protect</li> </ul> | <ul style="list-style-type: none"> <li>▪ What constitutes Intellectual Property in a legal sense</li> <li>▪ What IP researchers produce and its importance to them</li> <li>▪ Understanding the views of IP by different organisations through a role play negotiation exercise</li> </ul>   |
| Key Messages   | Why this is important  |
| <ul style="list-style-type: none"> <li>▪ Always consider IP in research agreements</li> <li>▪ Be aware of signing away IP rights and carefully examine contracts</li> <li>▪ IP is important for being able to use research results to generate impact</li> <li>▪ If researchers sign away IP rights they may not be able to use results from their research in the future</li> </ul>   | <p><b>Research governance and organisation: The knowledge of the standards, requirements and professionalism to do research</b></p> <p>All researchers produce IP</p> <ul style="list-style-type: none"> <li>▪ Only the owner of IP can benefit</li> <li>▪ Without protecting IP researchers cannot benefit from their own research in the future - both academically (e.g. through publications) and commercially.</li> </ul> |

**Other modules this module is linked with**

- Knowledge transfer and working with business – Intellectual property ownership and intellectual property protection is of particular importance when working with non-academic project partners.
- Impact – being able to use IP from research increases the ability to achieve impact from your research

**5.3.4 Knowledge Transfer and working with business**

Working with businesses is an important part of innovating research and applying research into practice. Understanding how to collaborate with businesses and what knowledge transfer mechanisms there are between Researchers, research organisations and businesses will increase the chances of these collaborations happening.

| Learning Objectives  | Key Elements  |
|--|---|
| <ul style="list-style-type: none"> <li>▪ To appreciate the benefits, opportunities and challenges of working with business</li> <li>▪ To understand what researchers have to offer businesses</li> <li>▪ To understand what is meant by Knowledge Transfer</li> <li>▪ To understand the drivers for knowledge transfer from a researcher perspective</li> <li>▪ To understand the drivers for knowledge transfer from a business perspective</li> <li>▪ To know the activities researchers can do to work with businesses</li> </ul> | <ul style="list-style-type: none"> <li>▪ What knowledge transfer is and what it refers to</li> <li>▪ The challenges, benefits and opportunities for researchers of working with businesses</li> <li>▪ The benefits to all involved</li> <li>▪ Being able to describe and explain benefits to others</li> <li>▪ Being able to initiate appropriate knowledge transfer activities with a business correct partner</li> <li>▪ Appreciating the business perspective</li> </ul> |
| Key Messages   | Why this is important   |
| <ul style="list-style-type: none"> <li>▪ To be able to work with businesses effectively researchers must be able to explicitly explain the benefits to businesses</li> </ul>   | <p><b>Engagement, influence and impact: The knowledge and skills to work with others and ensure the wider impact of research</b></p>  |

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| <ul style="list-style-type: none"> <li>▪ Researchers need to know the knowledge transfer activities they can initiate</li> <li>▪ Knowledge transfer increases impact from research</li> <li>▪ Successfully working with businesses is good for all stakeholders</li> </ul> | <p>The transfer of knowledge between researchers and the non-academic community enhances economic growth and societal wellbeing.</p> <ul style="list-style-type: none"> <li>▪ For academics, working with businesses can be a way of gaining new perspectives, directions and approaches for research.</li> <li>▪ The impact from researcher can be significantly enhanced through business collaborations.</li> </ul> |
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| Other modules this module is linked with  |
|---|
| <ul style="list-style-type: none"> <li>• Research communication – Working with businesses and any other non-academic partner requires highly effective research communication skills.</li> <li>• Intellectual property – When working with non-academic partners intellectual property needs to be a fundamental consideration.</li> <li>• Impact – Participating in knowledge transfer activities increases the likelihood of impact from your research</li> </ul> |

### **5.3.5 Bidding and winning; costing and pricing**

This module is split into two closely related topics with one focussing on proposal development and the other focussing on the budgetary and financial aspects of project proposals.

#### **5.3.5.1 Bidding and winning**

All researchers should have the skills to apply for and win funding for their research. Funding means that the research can be undertaken. Researchers need to know how to understand funder requirements and how to write and structure proposals to increase the chances of the proposal being funded.

| Learning Objectives   | Key Elements   |
|---|--|
| <ul style="list-style-type: none"> <li>▪ To understand what funder requirements are</li> <li>▪ To know how to structure and prepare a high quality research funding proposal</li> </ul> | <ul style="list-style-type: none"> <li>▪ Why apply for funding</li> <li>▪ What do funders want</li> <li>▪ What do you have to offer (the project and your track record)</li> </ul> |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ To understand why proposals succeed/fail to secure funding</li> <li>▪ To understand how funders evaluate proposals</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Articulating and structuring your research idea and proposal (purpose, goals, research questions, objectives, outputs and outcomes, impact)</li> <li>▪ Link back to OSR</li> <li>▪ Funders evaluation of proposals</li> <li>▪ What makes proposals a success/failure</li> </ul>  |
| <b>Key Messages</b>   | <b>Why this is important</b>  |
| <ul style="list-style-type: none"> <li>▪ Successful funding proposals show impact</li> <li>▪ All researchers should apply for research funding</li> <li>▪ Securing research funding improves researcher prestige</li> <li>▪ Target your proposal to what the funder is looking for</li> </ul> | <p><b>Research Governance and organisation:</b></p> <p><b>Knowledge of the professional standards and requirements to do research</b></p> <p>All researchers need to know where to apply and how to apply for funding for their research.</p> <ul style="list-style-type: none"> <li>▪ Without funding it is very difficult to undertake research</li> <li>▪ Knowing how to frame your research to prospective funders and to adapt this style accordingly is incredibly important to secure funding</li> </ul> |

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| <b>Other modules this module is linked with</b>  |
| All – this module is inherently linked to all the other modules and to effectively bid for, secure and deliver funded research projects will require the application of many skills. |

### ***5.3.5.2 Costing and pricing***

Being able to accurately cost and price research is important aspect of preparing a funding proposal. Researchers need to know how much it costs to undertake their research as this will determine the price that is presented to the funder of their work. Researchers need to know that the price can vary depending on the funder funding the work.

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| <b>Learning Objectives</b>   | <b>Key elements</b>  |
| <ul style="list-style-type: none"> <li>▪ To be able to identify the costs to include in a research project budget</li> </ul> | <ul style="list-style-type: none"> <li>▪ How to cost research (identifying what costs to include)</li> </ul> |

| <ul style="list-style-type: none"> <li>▪ To understand why it is important to fully and accurately cost research project budgets</li> <li>▪ To understand the difference between the cost and price of research projects</li> <li>▪ To be able to accurately cost research projects</li> </ul>                      | <ul style="list-style-type: none"> <li>▪ Categorising costs</li> <li>▪ Full Economic costing in UK</li> <li>▪ Cost vs price</li> </ul>  |
|---|---|
| Key Messages  | Why this is important   |
| <ul style="list-style-type: none"> <li>▪ Fully costing research projects is important for sustainability</li> <li>▪ It is important to be able to identify the costs of a research project accurately including all expenses</li> <li>▪ Cost and Price are not the same and cost is used to inform price</li> </ul> | <p><b>Research Governance and organisation:</b></p> <p><b>Knowledge of the professional standards and requirements to do research</b></p> <p>Correct costing and pricing is essential for securing research funding</p> <ul style="list-style-type: none"> <li>▪ Considering the cost of research projects improves sustainability</li> <li>▪ Allows investment in research infrastructure and research staff</li> <li>▪ Knowing the cost of research enables you to present a price to the funder</li> </ul> |

| Other modules this module is linked with   |
|--|
| <ul style="list-style-type: none"> <li>• Bidding and winning – Sponsors of research projects will expect to see an accurate budget and failing in this aspect can mean the project does not secure funding or is under-budgeted and unable to be completed.</li> <li>• Knowledge transfer and working with business – It is important that non-grant funded work is effectively costed and priced taking into account the correct considerations.</li> </ul> |

## 6. Additional Preparation required

**IN ADDITION TO ALL OF THE TRAINING MATERIALS PROVIDED BY THE UK CONSULTANTS AND THE INFORMATION PROVIDED ABOVE, IT IS IMPORTANT THAT THE TRAINERS DRAW ON THEIR OWN EXPERIENCE AND EXAMPLES THAT THEY CAN REFER TO DURING THE TRAINING – SO THEY MUST THINK OF THESE IN ADVANCE AND HOW THEY CAN INCOPORATE THESE INTO THE TRAINING**

### Vietnamese trainers preparation requirements:

| Task/Item  | Recommended completion date |
|--|-----------------------------|
| 1. Pre-workshop survey                                   | 08/11/19                    |
| 2. Post-workshop survey                                  | 08/11/19                    |
| 3. Google doc shared web links page                      | 13/11/19                    |
| 4. 3 Minute thesis google slides shared document         | 08/11/19                    |
| 5. 3 minute thesis participant feedback form             | 08/11/19                    |
| 6. Session by session feedback form                      | 08/11/19                    |
| 7. Hardcopy handouts for participants                    | 22/11/19                    |
| 8. Local downloads of any videos                         | 22/11/19                    |
| 9. Week session timings overview agreed (week timetable) | 01/11/19                    |
| 10. Session by session lesson plan (5 minute accuracy)   | 11/11/19                    |
| 11. Training slides for each session                     | 21/11/19                    |
| 12. Consolidated slide deck for each day                 | 28/11/19                    |

### **7. Materials to support the delivery of the training**

The UK consultants will create a shared webpage to provide the following materials:

- Slides from previous workshops
- Handouts from previous workshops
- Video download links (the videos used by the UK consultants)
- Guidance to create pre and post questionnaires
- Guidance on how to set up google docs
- Guidance on how to create session by session feedback form
- Guidance on how to run a world café
- Example of timing document for training
- Guidance for 3 minute thesis delivery