MEICOM

ITNA TRAINING NEEDS ANALYSIS

Successful and timely completion of your research degree will depend on developing a mixture of subject-specific skills, intellectual skills, such as critical thinking, and more generic skills, like communication and enterprise. Many of these skills will also be important in your future life, whatever career or life choices you make.

The ITNA Training Needs Analysis form uses Vitae's Researcher Development Framework (RDF) to help you think about your current skills, pinpoint gaps in your knowledge, and identify areas for future development. The RDF articulates the knowledge, behaviours and attitudes of researchers, from postgraduates to establish academic leaders and is endorsed by Research Councils UK.

There are four sections to the form, based on the RDF domains (below or for more details, including suggested skills levels see:

https://www.vitae.ac.uk/vitae-publications/rdf-related/researcher-development-framework-rdf-vitae.pdf/view)

Use the sections to outline your goals for this year in each area. At the end of the form is a summary sheet to outline your specific plans.



Domain A: Knowledge and Intellectual Abilities

The knowledge, intellectual abilities, and techniques used in research (Knowledge Base, Cognitive Abilities, Creativity)

- Be familiar with and be able to apply a broad range of general molecular biology techniques.
 - Becoming familiar with confocal microscopes, be able to apply various techniques and stay informed about the last technologies in the field.
 - Improve my knowledge about the control of meiosis, and trying to stay up to date by reading newly published papers on the subject regularly.
 - Improve my skills in planning an experiment, learning what the best way is to prove any questions I want to answer, how many repetitions I need, what kind of controls I need etc.
 - Improve my skills in using software to do genomics, improve my skills on how to predict homologous genes, conserved domains, and phosphorylation sites etc.
 - Improve my German skills to be able to communicate about my research in German.

Domain B: Personal Effectiveness

The personal qualities and approach to be an effective researcher (Professional and Career Development, Self-Management, Personal Qualities)

- Improve my skills in critical and creative thinking, to be able to pose new questions and design experiments to be able to answer these questions
- Improve my planning and time management skills, to be able to work efficiently
- Improve my writing skills, to be able to communicate my research in an accurate and understandable manner.
- Improve my public talks, by better understanding the knowledge level of my audience and by making clear and easily understandable slides.
- Develop my analytical skills to be able to critically read a paper and evaluate it's strengths and weaknesses

Domain C: Research Governance and Organization

The knowledge of standards, requirements, and professionalism to do research (Professional Conduct, Research Management, Finance, Funding and Resources)

- Be aware of the costs of the research expenses (e.g. lab equipment, work travels...) to manage my grant funds and common funds of the lab well.
- Be aware of the materials and research equipment available at the institute, to be able to make fully use of them in the design of my experiments.
- Establishing priorities in my research, learn when to continue with an lead and when to stop.

Domain D: Engagement, influence and impact

The knowledge and skills to work with others and ensure the wider impact of research (Working with Others, Communication and Dissemination, Engagement and Impact)

- Establish a network with the other ESR's and PIs within MEICOM, communicate with them regularly and efficiently during meetings, via email and the social networks
- Help organize outreach events and thereby work together with the other ESR's , while trying to communicate efficiently
- Participate in outreach events
- Tutoring of Bachelor and master students during their practical/thesis work in the lab.
- (Poster) presentation of my research at international conferences.
- Publishing of at least one scientific paper.
- Try to communicate my research in a way that's understandable for people with no scientific background. Thereby educating them on the (molecular)techniques that are used in modern science

You can use this section to identify a small number of specific prioritised goals for your development year. This should be revisited at the end of the year to assess progress.

Identified skill area for development	Planned Activity	Success criteria (i.e. how will you know you've achieved your goal)	Deadline (when do you want to achieve it by?)
Personal efectiveness	Make a plannig for the goals I want to achieve within my PhD.	I have made a document that has included my goals and the planning of these goals in the next year(s)	March 2019
Knowledge and intellectual abilities	Be familiar with molecular technologies used in our lab.	Construction of at least 4 meiotic marker gene constructs in maize	December 2019
Engagement, influence and impact	Organise and plan outreach activities with the other ESR's .	Coordinate and set-up multiple outreach activities, design spectific activities to be done at outreach events	July 2015
Engagement, influence and impact	Participation in outreach activities.	Think thank outreach event in Birmingham.	February 2019

Signature (MEICOM ESR)

..... Date.....

Signature (Supervisor)

..... Date.....

Signature (Second or co-Supervisor)

..... Date.....