



HEA Odyssey Report
Pilot: December 2023 to December 2024
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Part 1 Executive Summary

1.1 HEA Odyssey Programme

The HEA Odyssey programme is an intensive 2-day programme with individual before and after reviews of each participant, that enables penultimate and final year PhD students to adapt, integrate and expand on their existing expertise to prepare for the many diverse career choices ahead of them. It enables participants to explore a variety of avenues and identify career options that excite and challenge beyond academia. It also highlights the significant differences and/or advantages of the many workplace cultures that exist beyond academia.

"It has given me confidence and I learn how to improve my CV, search for jobs, skills to improve and many more."

This report presents the findings from the HEA Odyssey Programme in the Pilot phase of its operation (January 2024 to December 2024). The programme was established to encourage the change in perspective needed for penultimate and final year PhD's to explore and progress to new career paths beyond academia. Most professional training programmes focus on how to train individuals in a particular area e.g., Project Management, Leadership, Communication etc. but few focus on how to assist the individual with career advancement via mobility to a different professional sector. The growing visibility and popularity of the HEA Odyssey Programme highlights the obvious need to assist with the long-term career goals of Ireland's PhD's within academia.

Evaluating the long-term success of the HEA Odyssey Programme participants relative to those who have not availed of the programme will be challenging. There is a lot of information available on the career pathways of university graduates. There is very little (if any) information on the career trajectories of PhD's within Third Level institutions globally and it is difficult to track the careers of individuals who graduate academia with PhD's. Indeed, this study does not include information on those who have transitioned to roles beyond academia without the aid of a career transition programme.

1.2 Significant Findings of the Pilot HEA Odyssey

The findings presented below derive from comprehensive before and after questionnaires completed by the Odyssey Participants, as well as the Odyssey Shadow questionnaire. These tools were utilized to gather detailed insights and measure the impact of the program, ensuring a thorough evaluation of participant experiences and outcomes. See Appendix A and B for all anonymized feedback.

- 1. Many PhD students are unsure where to begin when searching for roles outside of academia.
- 2. Most participants found the Programme's content to be extremely useful.
- 3. PhD students require support in articulating their skills to non-academic employers.
- 4. Participants do not need to further "upskill" or "re-focus" their education and training. The PhD is a passport to career success beyond academia.
- 5. Participants already have the necessary competencies for roles beyond academia; the challenge is that they often do not realize they possess these skills.
- 6. A 2-day programme is "just right".
- 7. The Competency-based CV is very helpful to the participants.
- 8. 99% of participants believe that the programme would be beneficial for all PhD students.
- 9. It is important to address and acknowledge the organizational cultural barriers that participants face in some organisations when considering careers outside academia.
- 10. Overall, the Observers/Shadows of the programme from participating universities appreciated the programme and provided valuable feedback.
- 11.50% of Observers/Shadows who answered the survey wish to implement the programme in their own universities with 40% undecided at the time of writing.
- 12. More intense interaction with the Observers/Shadows is required and built into the programme going forward.

"If anything, the programme totally exceeded expectations. Usually, these courses attempt to tell you about your specific field and don't know enough about it so it never works well whereas this embraces the fact there are loads of different fields and you can work in any of them not just the area you have done your PhD."

Part 2. Introduction

2.1 Background

In a communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions the European Commission notes "The imbalances between the number of PhD graduates and the number of tenure track positions in the public science systems are an obstacle for retaining talent. Training and career development of researchers insufficiently focusses on entrepreneurship or opportunities outside academia. The increased dependency on short-lived, project-based, research funding, has also contributed to this. It further notes that "The skills mismatches constitute a worrying trend for industry and businesses with negative impact on innovation and productivity both in highly innovative industry and services sectors. Incentivising researchers to pursue a career outside academia through enhanced inter-sectoral circulation schemes involving industry can help improve researchers' employability and boost the permeability of talents across Europe's economy and society. "1

In the context of the Irish Government's "Impact 2030: Ireland's Research and Innovation Strategy," Minister for Further and Higher Education, Research, Innovation and Science, Simon Harris (at the time), emphasized the importance of nurturing and attracting talent. He stated, "Impact 2030 will maximize the impact of research and innovation on many national priorities. It will progress objectives shared across the Irish R&I system such as maximizing its impact on public policymaking and implementation, and nurturing and attracting talent". He went on to say "Our ambition is to make Ireland a global innovation leader by 2030. *To achieve this, we must harness the full potential of our PhD talent, ensuring they are equipped to contribute to both academic and non-academic sectors.*"

In endeavouring to address these ambitions for PhD students' The HEA Odyssey echoes the spirit of both European and Irish National Research Policy.

¹ CELEX:52020DC0628:EN:TXT.pdf (europa.eu)

² https://www.djei.ie/en/Publications/Publication-files/Innovation-2020.pdf

2.2 Why introduce a career transition programme?

Career transition programmes address the career needs of the individual PhD, the needs of European industry and connect with various government strategies employed to improve global business and the global economy as a whole. At a time when the European Union is proving an attractive alternative location to the UK and US talent pool, the provision of well-planned effective training programmes for PhD's in European Universities can only increase our attractiveness to international scientists, humanities

"The program changed my mind set and especially raised my awareness towards the skills I have which I thought I do not have initially. Moreover, it showed me how PhDs are actually needed in industry, I thought I just fit in Academia and some few roles in industry."

researchers and other talented people. Minister Simon Harris recently emphasized the importance of aligning research investment and facilities with talent development in higher education. He stated, "Today we continue our significant investment into higher education. These projects will help support the creation of approximately 21,000 square metres of new build and over 51,000 meters of reimagined and refurbished space. They will also assist the creation of enhanced capacity to support over 8,500 whole time equivalent student places in higher education institutions, across STEM, Social Sciences, Science and multi-disciplinary areas". The HEA Odyssey is part of this synergy.

7

 $^{^3 \} https://hea.ie/2023/04/19/minister-harris-announces-approval-for-e100-million-capital-investment-under-project-ireland-2040-for-four-higher-education-universities/$

Part 3. The Odyssey Programme

3.1 Mission

The HEA Odyssey programme enables penultimate and final year PhD students to adapt, integrate and channel their existing expertise to prepare for the many diverse career choices ahead of them. It enables participants to explore a variety of avenues and identify career options that excite and challenge beyond academia. It also highlights the significant differences and/or advantages of the many workplace cultures that exist beyond academia.

3.2 Context

The observations in this report must be seen within the context of the global academic job market and the growing numbers of PhD students, PhD graduates and Post-Doctoral Researchers – a context that few Researchers and PhD students appear to be aware of.⁴

Inside Higher Education sums it up as follows:

"Every year, in almost every discipline, newly minted Ph.D.'s out number tenure-track job postings by a substantial margin. While that trend has gone on for decades, most Ph.D. programs continue to maintain or even increase student enrollments and remain structured as a form of academic career training. Thus, growing numbers of Ph.D. graduates are trained for, and often expect an academic career that's not available to them."

Additionally, the number of PhD students, graduates, and post-doctoral researchers continues to grow, further intensifying the competition for academic roles.⁵ Hence a career intervention programme for penultimate and PhD students is now very relevant and necessary.

⁴ How the Ph.D. job crisis is built into the system and what can be done about it (opinion) (insidehighered.com)

⁵ Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) 2022 | NSF - National Science Foundation

3.4 Overview of The Odyssey Programme in its Pilot Phase

Step 1: Pre-Meeting

Facilitator completes a one-to-one pre-meeting with each participant before the Odyssey Programme. These meetings usually last a half hour. The objective of these meetings is three-fold:

- An opportunity for the participants to get to know the facilitator and *vice versa* and, most importantly, build trust.
- 2 Provides the participant with an overview of what to expect from the two days of group sessions and presentations.
- 3 Enables participants to reflect on their career in academia and their personal career needs and expectations by answering a series of leading questions. (See appendix C for questions asked).

Step 2: Two Day Agenda (See appendix D)

Day One: Shift the participants' thinking on their career prospects in a group setting.

Day Two: Enable them to move from a shift in thinking to implement a shift in their career trajectories.

Step 3: Post-Meeting

One-to-one post-meeting with each participant following the Odyssey Programme. These meetings (excluding coordinator preparation) usually last one hour. Before this meeting, each participant will have provided their resumé/CV in an MS Word document for editing. This meeting combines an individual **CV** clinic with a general discussion of how the participant can translate the programme lessons into practice.

Part 4. Study Approach, Methodology and Overview of Data

4.1 Report Approach

This report highlights the observations and feedback from participants and Observers following their involvement in the HEA Pilot Odyssey Programme.

4.2 Sources of Evidence

The report draws on four sources of evidence:

- 1 Data gathered through completed "before" questionnaires from 107 of the participants in the programme.
- 2 Data gathered from the final Odyssey questionnaire with 94 participant responses.
- 3 Data gathered from the Shadow questionnaire with 10 responses.
- 4 Individual quotes from participants provided directly after the programme.

The data included in this report provides a snapshot of a cohort of participants who have completed the HEA Pilot Odyssey programme. Agreement to supply the anonymous personal data in this report and other similar research was provided through a data protection form completed by each participant prior to the programme. Although the sample may not be statistically representative of the national PhD population in Irish HEI's, data has been collected from participants in all academic disciplines from Irish 6 Universities.

4.3 The Study Cohort

Between January 2024 and October 2024, 98 participants completed the Odyssey programme. The 2-day programme ran 6 times between those dates with a maximum number of 20 participants per session. The sessions also included 2 "Observers" from each participating university and 2 from UCC to address a potential risk to the project. In 2024 there were 14 Observers and 98 participants. Participants from all disciplines were included. 119 participants signed up for the programme with 21 "no-shows". There were more no shows from the technical universities than the non-technical universities. Where reasons for non-attendance were provided, they included illness, not enough time, and other more pressing commitments. The dates of each 2-day

session were communicated to all participants through their own university channels well in advance. These 6 sessions were free of charge to the participants. The HEA covered all costs of the programme.

Part 5. The Participants

5.1 Demographics

The participant cohort represented all disciplines and came from 6 separate universities and technical universities. Prior to the programme, each participant had an individual one to one meeting with the coordinator and subsequently completed a series of questions via a Qualtrics questionnaire. Below are visual representations of the data collected in the pre-Odyssey one to ones.

"I would never regret doing the Odyssey program as it opened my eyes on job opportunities in other areas and made me feel confident that I could fit in well in companies beyond classroom setting and working collaboratively with other people."

"I realized that I have many options. From a psychological view, it is really motivating and a boost for self-esteem."

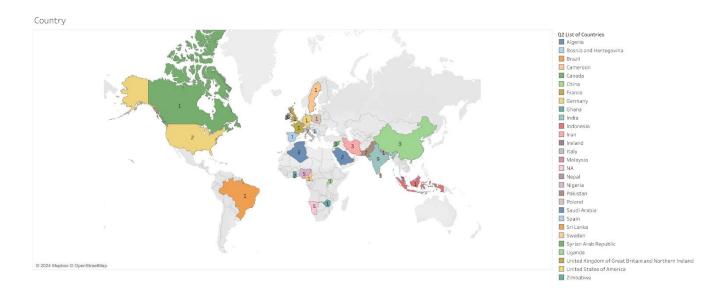


Figure 1 Participants from many countries participated in the programme

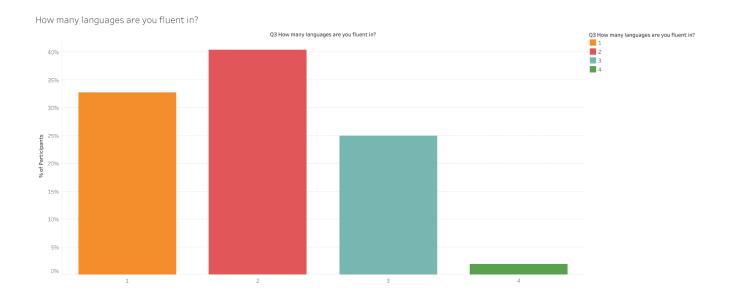


Figure 2 Most participants have fluency in more than one language

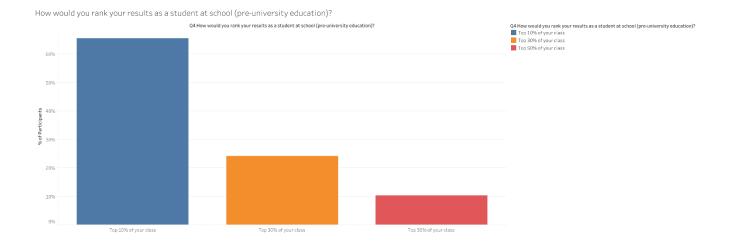


Figure 3 65% note they were best in class in school



Figure 4 72% pursued a master's degree prior to embarking on a PhD

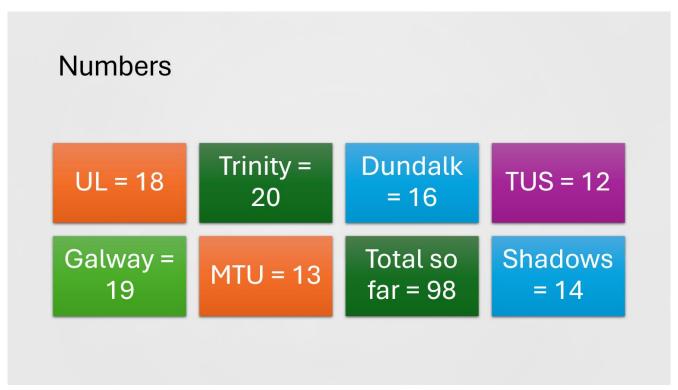


Figure 5 Participant numbers per university

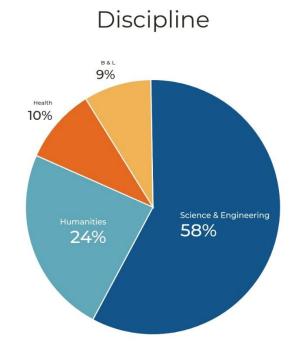


Figure 6 Participant disciplines

5.2 Competencies of the participants

"The PhD student has a lot of skills even though we don't think this"

Competencies are the blend of skills, knowledge, and abilities that enable individuals to perform their roles effectively and efficiently⁶. They are crucial in professional development, as they help individuals navigate complex work environments, solve problems, and achieve their goals. Competencies can be broadly categorized into technical skills which are specific to a particular field or job, and soft skills, which are more general and applicable across various domains.

"Realization that during my four years of doing a PhD I have gained many valuable skills that would be greatly appreciated within industry. I also learned that I have to put value on my expertise and skills developed to sell myself better during an interview."

The data in this study indicates that PhD students possess a wide range of competencies that they may not fully recognize in themselves. Throughout their academic journey, many have developed advanced skills in data analysis, problem solving, organisational skills, communication skills including written communication and many more. As seen from the data below PhD students frequently engage in the supervision of others whether in a part time job or mentoring undergraduate or master's students. This experience enhances their leadership potential and organizational skills, as they progress through their studies. What is most surprising is that PhD students accumulate many competencies and don't seem to realize it.

⁶ Competency - Oxford Reference and Competencies (opm.gov)

Competencies are very important not only in academia but also in non-academic settings. PhD's actually recognizing that they have these competencies themselves significantly enhances their career prospects and personal growth which is borne out in the after-Odyssey feedback.

Communication - Written

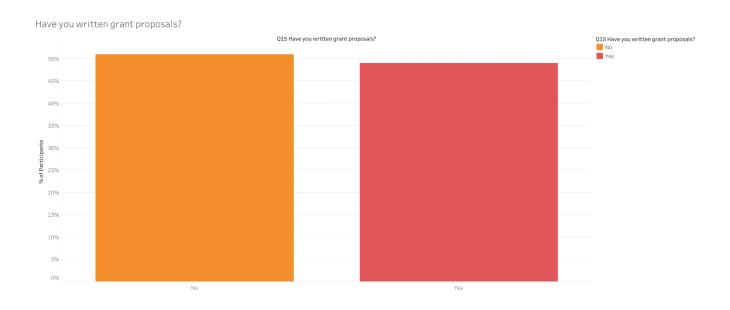


Figure 7 52% have written a grant proposal

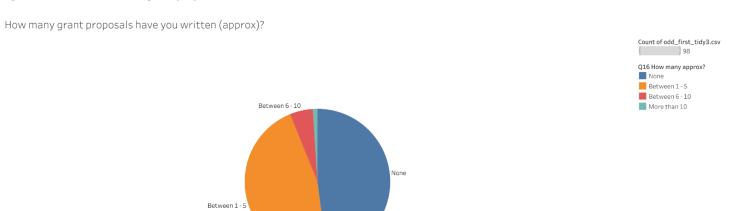


Figure 8 Of those who have written a grant proposal many have written more than one

Data Analysis Programming and IT

Do you work with large data sets?

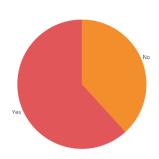


Figure 9 The majority work with large data sets

Have you programming languages, good IT skills?

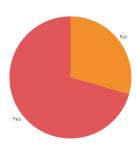


Figure 10 The majority have programming and good IT skills



Count of odd_first_tidy3.csv
102
Q18 Have you programming languages, good IT skills?
No
Yes

Budget Management

Do you manage research grants like budgets, deliverables?

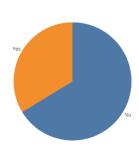




Figure 11 The majority do not manage research grants e.g. budget and deliverables – this should be encouraged where possible

Managing Teams

Have you ever managed teams or individuals within or beyond academia?

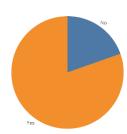




Figure 12 The majority have experience in managing teams

Conference Organisation

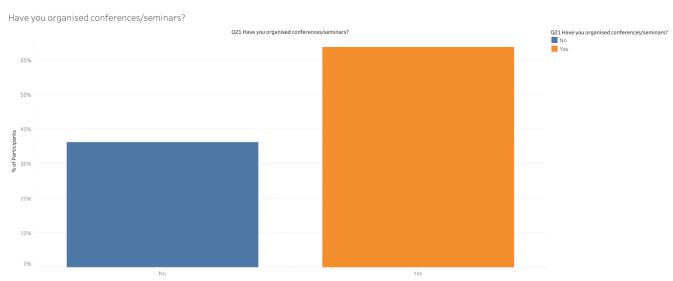


Figure 13 The majority have experience in organizing conferences

Making Presentations

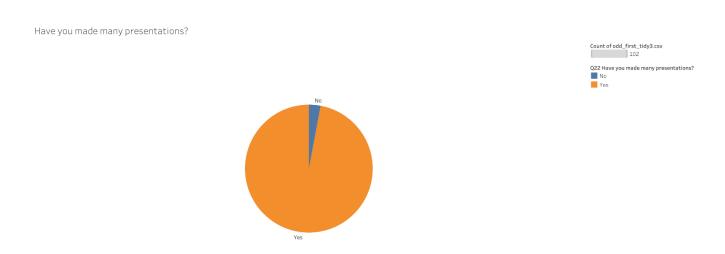


Figure 14 The majority have experience in presenting

5.3 Training and Career Advice

Training

Do you seek out training in transferable skills?

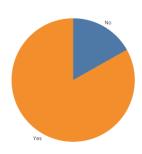


Figure 15 The majority seek out training in transferable skills

Are you encouraged by your PhD supervisor to seek out training?

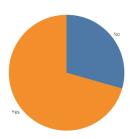


Figure 16 The majority are encouraged by their supervisor to seek out training



Career Advice

Have you ever received career advice from your supervisor?

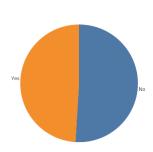


Figure 17 A slight majority note that they have not received career advice from their supervisor

Connection with Industry

Do you connect with industry in any way through your studies?

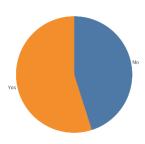


Figure 18 The majority note that they have connect with industry during their PhD



Count of odd_first_tidy3.csv

Working outside Academia

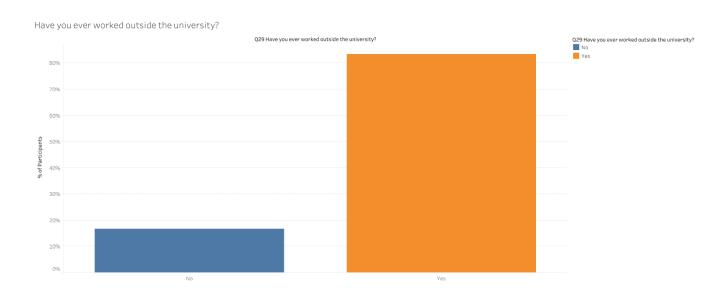


Figure 19 The majority note that they have worked outside of academia many in part time roles – see below

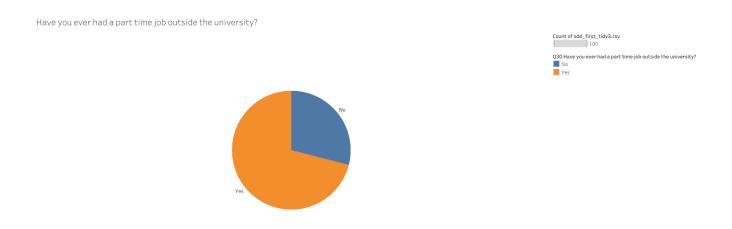


Figure 20 The majority note that they have worked part time

Did you enjoy your part time job outside the university?

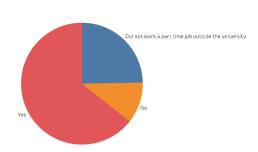


Figure 21 The majority enjoyed their part time roles

5.4 Future

Moving beyond Academia

Would you like to move beyond academia?

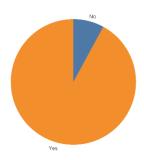


Figure 22 The majority would like to move beyond Academia



Count of odd_first_tidy3.csv

Q39 Would you like to move beyond academia?
No
Yes

Count of odd_first_tidy3.csv

Q32 Did you enjoy it?
Did not work a part time job outside the university
No
Yes





Figure 23 The majority have not applied for positions beyond academia

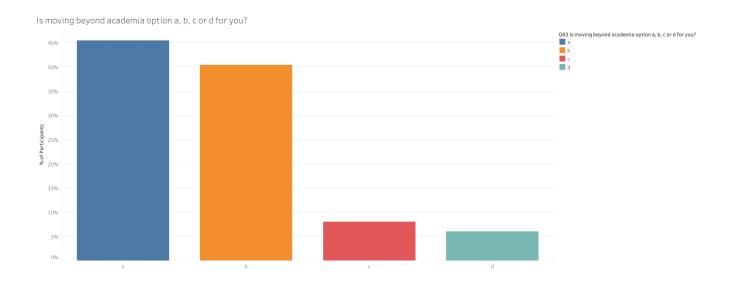


Figure 24 Moving beyond academia is option A for the majority

Part 6. Observers/Shadows

6.1 Context

The inclusion of observers/shadows in the Odyssey Programme (14 to date) is crucial for its broader impact and sustainability. Observers, who are either faculty or professional staff from participating universities, participate alongside the PhD students to gain firsthand experience and understanding of the programme's structure, content, and methodologies. This immersive learning allows them to observe best practices, engage with the programme, and gather insights that are essential for effectively implementing the programme at their own university. By doing so, Observers help to ensure that the benefits of the Odyssey Programme extend beyond the initial cohort, fostering a ripple effect that can enhance doctoral training and support across multiple universities.

Observers also play a vital role in providing feedback and contributing to the continuous improvement of the programme. Their external perspective highlights areas for improvement (see below and attached report). This collaborative approach not only enriches the learning experience for the PhD students but also strengthens the overall quality and effectiveness of the programme. By preparing Observers to become future facilitators, the HEA Odyssey Programme builds a network of knowledgeable and skilled professionals who can champion and sustain its objectives, ultimately leading to a more robust and widespread adoption of innovative doctoral training practices in Ireland.

Of the 14 Observers 10 responded to the survey. One shadow has recently resigned their position, so 13 Observers remain.

6.2 Shadow Survey Comments

1. Shadow and Host HEI Feedback

The feedback from the Observers was generally good. See survey results Appendix B⁷ Suggestions included:

⁷ Refer to Appendix B Shadow Survey Results

- a) "There was no real coordination with participating institutions -There was no acknowledgement during the workshop of supports already in place for our researchers." The programme will be amended to reflect this feedback. This has been identified as a key action in report attached.
- b) "We are open about the low numbers of PhDs moving into permanent academic roles and also about the range of exciting careers one can move into after the PhD. A more constructive message to give would be along these lines: the PhD is not something that has to lead to an academic job. In most cases it doesn't. It is an enriching journey that prepares you for a range of exciting careers. It is part of your journey to discover what career options will suit you best. This message needs to be given from the start of the PhD. We find this approach more constructive." The programme will be amended to incorporate this feedback.
- c) "Add viewpoint of an existing academic for balance" Coordinator will reflect on this feedback.
- d) "The two days online delivery were intense, and a short comfort break every 2 hours would have been a welcome relief to get a coffee or stretch the legs. Maybe consider making the 'camera on' compulsory for participants to achieve a completion certificate." The programme will be amended to incorporate this feedback.
- e) "Diversify the sources of your presentation data, dial down the 'fear factor' argument and build collaboration with recruiters based across Ireland and abroad." Coordinator will strive to incorporate this feedback.
- f) Please see Appendix F for coordinators response to one shadow's dissenting views.

6.3 Feedback from Observers - Graphics

Overall Experience: How would you rate your overall experience with the Odyssey Programme?



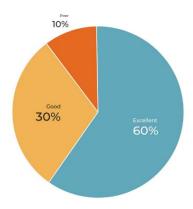


Figure 25 Poor, Good and Excellent values as percentages

Satisfaction with the contents of the Programme

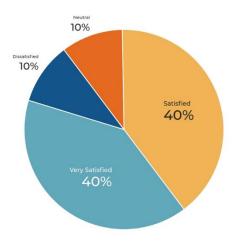


Figure 26 Dissatisfied, Neutral, Satisfied and Very Satisfied

Quality of Materials

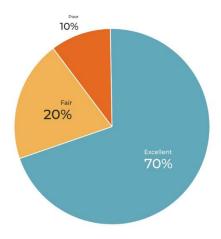


Figure 27 Excellent, Fair and Poor

How effective were the facilitators in delivering the programme content?

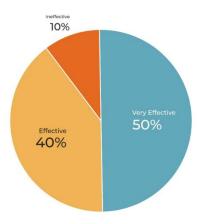


Figure 28 Very effective, effective and ineffective

Relevance of Programme Content to your needs and expectations

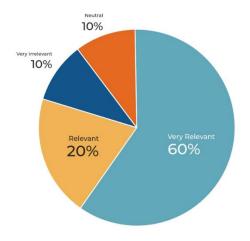


Figure 29 Very relevant, relevant, neutral, very irrelevant

How effective were the facilitators in delivering the programme content?

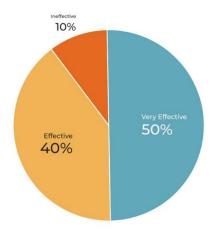


Figure 30 Very effective, effective, ineffective

How engaging did you find the programme activities and discussions?

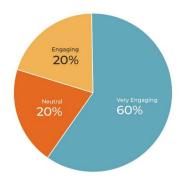


Figure 31 Very engaging, engaging, neutral

Do you feel confident in your university's ability to implement the Odyssey Programme?

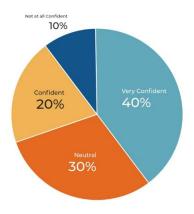


Figure 32 Very confident, confident, neutral, not at all confident

How would you rate the support provided by the Odyssey Programme team during the training?

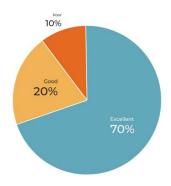


Figure 33 Excellent, Good, Poor

Do you plan to roll out the Odyssey Programme at your university?

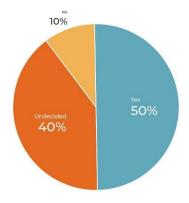


Figure 34 Yes, No, Undecided

Overall, the Observers were supportive of the Odyssey Programme, with one exception⁸. Their valuable feedback has provided the coordinator with important insights from both a meeting on the 16th of October⁹ and feedback received in writing. This feedback has been used to improve the programme further. The constructive criticism has allowed the coordinator to address specific areas of concern and enhance the overall experience for all participants as included in the attached plan for 2025. By incorporating their

⁸ See appendix F

⁹ See appendix E for Agenda and Minutes of the meeting with Observers

suggestions, the Odyssey Programme will continue to evolve and better meet the needs of Ireland's PhDs the third level sector and all stakeholders.

6.4 Feedback from Participants to Observers/Shadows regarding further training in their own institutions

The thought of a move from academia to industry can be challenging for some PhD students, but with the right support and resources the journey can be made easier. The participants of the programme have provided feedback as to what supports could be put in place to assist them further. When asked "what other interventions might help you?" the participants responded as per Appendix B however their points can be summarized as follows.

- a) **Networking and Applying for Irish Government Jobs** The participants mentioned job fairs, connecting with professionals on LinkedIn, and joining relevant online forums for networking. More information and assistance required when applying for Irish or other government permanent jobs.
- b) **Optimizing LinkedIn and Networking** More assistance in how to produce a strong LinkedIn profile for professional networking. How to engage with posts, join industry-specific groups, and reach out to connections for informational interviews to further enhance networking efforts.
- c) Career Fairs and Workshops PhD-focused career fairs which would provide opportunities to meet recruiters seeking advanced degrees. Workshops on job hunting, professional development, and exploring non-industry roles, particularly in the Humanities, would be most welcome.
- d) **Emotional and Mentoring Support** The transition from academia to industry can be emotionally challenging. Access to emotional support resources and mentoring programs would provide valuable guidance.
- e) **Mock Interviews and Skills Assessment** Participating in mock interview sessions and skills assessments would be a big help so that PhD's could prepare and identify their strengths and areas for improvement prior to a real interview.

Part 7. PhD Student Feedback

7.1 PhD Feedback Generally

PhD participants from all six universities involved in the HEA Odyssey Programme have consistently provided positive feedback, highlighting several key benefits. They appreciated the programme's ability to broaden their career perspectives beyond academia, helping them recognize and articulate their transferable skills for diverse professional environments. Many participants found the individualized support, such as one to one CV clinics particularly valuable. The programme's focus on personal growth, adaptability, and understanding different organisational cultures was also highlighted in the feedback. Overall, participants felt more confident and prepared to pursue varied career paths following participation in the HEA Odyssey Programme. The quotes placed throughout this report are direct quotes from the PhD participants.

"The programme was transformative beyond my expectations on both a professional and a personal level. It helped me learn to navigate the world beyond academia and to have confidence in the transferable skills that I had developed. I feel better equipped to enter the workforce outside of academia and would recommend that every graduate student that is fortunate enough to have the opportunity enroll in this programme."

Before the programme, 40% of PhD participants indicated that pursuing careers outside academia was their preferred choice (choice A). Additionally, 55% had already applied for non-academic positions, and 90% expressed a desire to transition beyond academia. These figures suggest a strong initial interest in exploring alternative career paths among the participants. After the programme, when asked if they would embrace organizational cultures beyond academia, 91% responded yes. Furthermore, 76% acknowledged that this represented a new direction for them. These results indicate that the programme may have positively influenced their confidence and readiness to adapt to new environments, highlighting a significant shift in career mindset and openness to new opportunities. Below are graphics which represent PhD feedback.

7.2 PhD Feedback Graphics

Was 2 days too long, just right, too short?

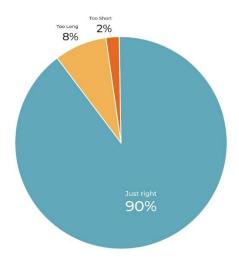
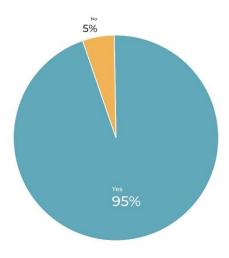


Figure 35 Just right, too long, too short

Did the content live up to your expectations?



Was the programme useful to you?

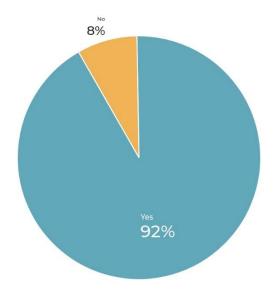


Figure 37 Yes, No

Did you have a Light Bulb Moment?

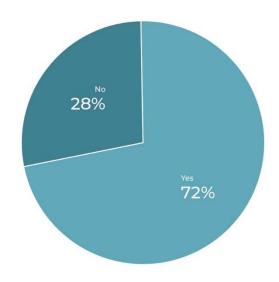


Figure 38 Yes, No

Was this programme different to what you might have experienced before?

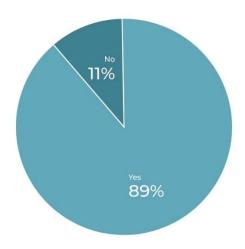


Figure 39 Yes, No

Do you think that you did not appreciate the skills you already have - beyond your research expertise

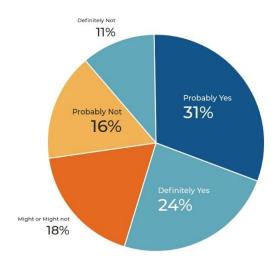


Figure 40 Definitely not, Probably Not, Maybe/Maybe not, Probably Yes, Definitely Yes

Have you changed your opinion on metrics for career success and failure?

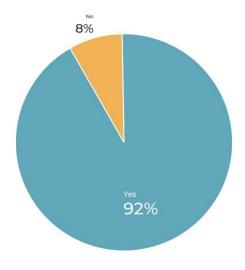


Figure 41 Yes, No

Do you think you would embrace organisational cultures beyond academia?

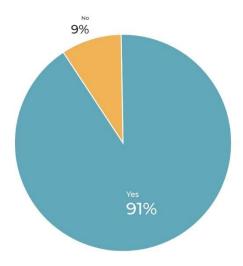


Figure 42 Yes, No

Is this a new departure for you?

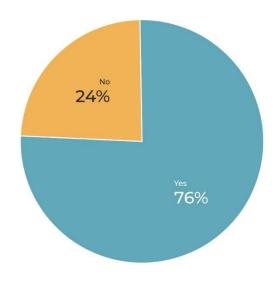


Figure 43 Yes, No

Has your opinion on the culture of academia changed?

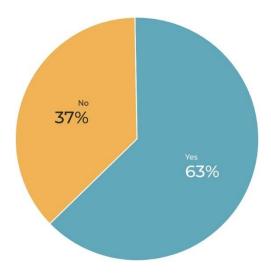


Figure 44 Yes, No

Do you think this programme would be helpful to all PhD Students?

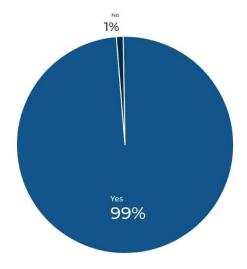


Figure 45 Yes, No

Part 8. Observations

8.1 High Achievers

The cohort are a bright and high achieving group of people most of whom have been the best in their class all the way through school. They are used to succeeding academically. In academia the currency is a PhD so probably for the first time many find themselves in a pool with their peers. The environment is hyper competitive, and the odds of academic career success are low. This can cause many anxieties and worries about where to go next or, for some, the thought of leaving academia following all the effort to succeed is a whole new departure. "Every graduate student believes that with enough hard work and perseverance they too can rise up the ranks and receive a permanent job." It can be difficult to leave academia when so much has been sacrificed to stay. It is also difficult for participants to absorb and believe the low rate of success in securing an academic position.

"It was very encouraging to hear how many other students also think of their current positions as a "for now" job and are actively looking to continue their careers outside of academia. It is helpful to hear encouragement towards careers outside of academia from authority figures, because many of us feel that we are pursuing an "alternative" option by looking into these careers, and the program shows that moving into industry is actually the most common (or at least most reasonable!) option."

 $^{^{10}\} https://www.theguardian.com/higher-education-network/2018/jun/22/permanent-academic-job-university-system-unfair-exploitative$

Following learnings from previous sessions of the programme it is apparent that the programme works best for PhD's in their final and penultimate year. PhD students who

"Yes, I realized I'm worth more than what I expected." "Seeing my own CV in competency format."

"There are so many jobs in industry in loads of different fields that I could get into. The application process and interview process is not as daunting now."

have not reached this milestone are focusing on their research question and are not thinking too deeply about their future careers.

8.2 Lightbulb Moments

Light bulb moments are very important for participants in the Odyssey Programme, especially for PhDs who often underestimate the breadth of their skills and competencies. These moments of sudden clarity and insight can help them recognize the value of their academic training, problem-solving abilities, and analytical skills. Realizing that their expertise extends beyond the confines of academia can be incredibly

"I had a light bulb moment, and I have decided to think out of the box and develop and identify my competencies because I do have them."

empowering. It opens up a world of possibilities, allowing them to see how their unique skill set can be applied in various industries, from technology and finance to consulting and beyond.

This shift in perspective is crucial for building confidence and exploring new career paths. Besides, these moments of realisation can significantly impact their career trajectories. By understanding that their skills are highly sought after in the non-academic job market, PhDs can better position themselves for roles that align with their personal interests and strengths. The Odyssey Programme aims to facilitate these insights, helping participants to develop a broader understanding of potential career opportunities enabling them to contribute meaningfully to sectors that benefit from their advanced knowledge and research capabilities. Ultimately, these light bulb moments are about unlocking potential and broadening horizons, ensuring that PhDs can thrive both within and outside of academia.

"Discovering that there are plenty of opportunities out there for people with PhD qualifications. You can be very determined when you begin looking and then reap the benefits of finding good opportunities. "

"That I am very employable if I learn how to market myself correctly. That I have so many opportunities waiting for me"

Part 9. Impact

Much of the impact of the Odyssey Programme is monitored in terms of employment statistics and volumes of delivery e.g., numbers of participants and programme cycle numbers. Many performance indicators focus on what can be easily measured however, can the true impact of a career transition programme such as HEA Odyssey ever be realistically measured given the complexity of the cohort involved and the context in which the programme is run? The interaction of so many variables means that both hard

"I enjoyed the practicality of the self-reflection on day 1. It could easily have been a lot of thinking without drawing out anything. The approach taken with Whole Brain provided really good insights to the individual with helpful outputs that could be used in interview settings or in writing your CV. Day 2 was extremely practical and action-oriented, which I liked. "

and soft outcomes must be explored. Hard outcomes are those that can be seen and measured in terms of simple quantities. Soft outcomes are those that are more subjective, more qualitative, and often not so easy to quantify.¹¹ At the time of writing this report only one participant has secured a role (Research Manager) as the majority are completing PhD's.

For the purposes of this report the impact of the Odyssey Programme will be measured in two ways:

- 1. Personal Impact
- 2. Institutional Impact

¹¹ https://warwick.ac.uk/fac/soc/ier/ngrf/effectiveguidance/improvingpractice/curriculum/cfbt_evidence_and_impact_-_resources_2010.pdf

9.1 Personal Impact

The Odyssey Programme has a profound personal impact on its participants, as evidenced by the transformative experiences shared by many in the feedback. One participant noted, "This programme opened my horizons and gave me the confidence that the skills that I am learning during my PhD are applicable to the workforce." This highlights the programme's role in broadening perspectives and instilling confidence in PhD candidates. By recognising the real-world applicability of their academic skills, participants can see beyond the traditional confines of academia. This newfound confidence is crucial for navigating the job market, as it empowers them to leverage their expertise in diverse professional settings.

Moreover, the Odyssey Programme provides a framework to help participants translate their skills to the workplace and effectively market themselves to potential employers. The programme offers valuable insights into identifying job opportunities that align with their skill sets and career aspirations. This guidance is instrumental in helping participants make informed career choices, ensuring they find roles that are not only a good fit for their abilities but also align with their long-term goals. By equipping PhD candidates with the tools and knowledge to successfully transition into the workforce, the HAE Odyssey Programme plays a vital role in shaping their professional futures and enhancing their overall career satisfaction.

"All the reflective activities used during the program helped me to start thinking about my own skills and how they can be improved to upgrade my professional CV and profile."

9.2 Institutional Impact

The provision of a talent pipeline from third level to industry is one of the goals of the Irish government. This programme will assist host HEI's in the delivery of this goal to

Government. In its recent publication Innovation 2030¹² the Department of Further and Higher Education, Innovation and Science states: "We will ensure that researchers have the right skills and opportunities so that they can make their maximum contribution, whether that is in academia, industry, the public sector or elsewhere, and realize their own career potential while doing so. Recognizing that the vast majority of early-career researchers will not remain in academia long-term, we will seek to improve career pathways, starting with a deeper understanding of the nature of the demand for research talent

There are few universities globally that offer programmes like the HEA Odyssey, and even fewer that receive the level of support that the HEA Odyssey programme enjoys. This unique initiative has positioned Ireland as a forward-thinking nation in terms of PhD training and development. By providing final-year PhD students with the tools and

"This programme opened my horizons and gave me the confidence that the skills that I am learning during my PhD are applicable to the workforce in addition to the concrete steps required to translate my skills to the workplace and to effectively sell myself to future employers, in addition to valuable information on how to choose a job that is a good fit to my skillset and aligns with my desired for my future."

confidence to pursue careers beyond academia, the HEA Odyssey Programme addresses a critical gap in traditional doctoral education. It helps participants recognise the value of their skills in various industries and sectors, thereby enhancing their employability and broadening their career prospects.

A recent article in the Chronicle of Higher Education in the United States highlighted the Odyssey Programme, underscoring its innovative approach and success.

¹² https://www.gov.ie/en/publication/27c78-impact-2030-irelands-new-research-and-innovation-strategy/

Although it is too early to say, the HEA Odyssey Programme could have a significant institutional impact on participating universities in Ireland. By integrating this programme into their doctoral training, universities will be able to enhance their reputation in the area of innovative education and career development for PhD students. The programme's focus on equipping PhD students with the skills and confidence to move into diverse career paths beyond academia may well increase the universities' appeal to prospective PhD candidates. The previous success of the UCC Odyssey Programme (see report) demonstrates that with a commitment to providing comprehensive support to their students, universities can ensure that their PhD students are well-prepared for the evolving job market of the 21st century.

By highlighting the applicability of PhD skills in various sectors, the programme facilitates collaborations and partnerships that benefit both students and institutions. As seen in the report reference above these relationships may well lead to increased funding opportunities, collaboration with industry and enhanced employability for graduates. The programme's emphasis on real-world applications of academic/research skills to meet the needs of the modern workforce will also not only favour the PhD candidates but the individual universities. Overall, the Odyssey Programme may well enrich the educational experience for PhD students but also help to reinforce the participating

"Now more than ever, amid budget cuts and academic-job shortages, we need to publicize our best practices and share programs that work. In that spirit, I want to spotlight a career-diversity program for graduate students in Ireland — the Odyssey Program at University College Cork — that deserves a try-out on the American side of the pond."

Prof Leonard Cassuto Chronicle of Higher Education United States

universities' role as pivotal contributors to Ireland's innovation and economic growth.

Part 10. Learning Outcomes

Learning outcomes are indicators of what a participant knows, understands, and can do after completion of dedicated training. Based on the participant feedback (see Appendix A) the participants have gained a lot of knowledge of how to view and engage with the non-academic job market. The feedback suggests that the participants are enabled to apply the change in perspective encouraged in this programme to willingly explore and progress new career prospects. PhD's gain a deeper awareness of the variety of interesting and challenging career options that exist outside of the university. They are in a position to analyse and appraise the current job market and the many opportunities available to them. They also appreciate the cultural differences and different metrics of success in organisations beyond academia, enhancing their potential for future leadership and impact in multiple sectors. It helps to provide "academia to industry" ambassadors creating pathways to and from third level to other high performing organisations.

"That I am a really well-rounded and highly skilled person, and I really don't give myself enough credit for how rare that is."

10.1 Facilitators

The nature of this programme is such that it requires the participants to connect with and trust the trainers. To nurture the ground-breaking change in perspective that this programme means to achieve, the trainers themselves require the organisational cultural awareness that comes from the experience of working within research performing organisations such as UCC together with the expertise and knowledge of

"Exceeded expectations - good intro, good thinking exercises, many excellent resources provided"

work practices and employment needs of organisations that are external to the university. The training providers complement each other in knowledge, skills and expertise.

See LinkedIn Profiles of the Facilitators:

- Mary Kate O'Regan
- o Jay Chopra PhD
- o Anne Gannon PhD
- o Fionnan O'Sullivan

"It focused on an overall look at finding career paths and looking at not just your skills but actually getting you to focus on what are your ideas of success. This is what gave me pause and made me realise it's not necessarily working in a lab that I want but to be challenged overall and that can be at a desk too."

Appendix A – See attached excel spreadsheet for PhD Feedback Appendix B Anonymous feedback from Observers

Question 1 to 9

						T .	1	1
Overall	Program	Materials	Relevance:	Facilitati	Engageme	Implementat	Support:	Future
Experienc	me	Quality:	How	on: How	nt: How	ion: Do you	How	Rollout: Do
e: How	Content:	How would	relevant	effective	engaging	feel	would	you plan to
would	How	you rate	was the	were the	did you	confident in	you rate	roll out the
you rate	satisfied	the quality	programm	facilitato	find the	your	the	Odyssey
your	are you	of the	e content	rs in	program	university's	support	Programm
overall	with the	materials	to your	deliverin	me	ability to	provided	e at your
experienc	content	provided	needs and	g the	activities	implement	by the	university?
e with the	provided	(e.g.,	expectatio	program	and	the Odyssey	Odyssey	
Odyssey	during	presentati	ns?	me	discussion	Programme?	Program	
Program	the	ons, CV's		content?	s?		me team	
me?	program)?					during the	
	me?						training?	
Good	Satisfied	Excellent	Relevant	Effective	Very	Confident	Excellent	Yes
					Engaging			
Good	Neutral	Fair	Neutral	Effective	Neutral	Neutral	Good	Undecided
Poor	Dissatisfi	Poor	Very	Ineffecti	Neutral	Not at All	Poor	No
	ed		Irrelevant	ve		Confident		
Excellent	Satisfied	Excellent	Very	Effective	Engaging	Confident	Excellent	Yes
			Relevant					
Excellent	Satisfied	Excellent	Very	Very	Very	Neutral	Excellent	Undecided
			Relevant	Effective	Engaging			
Excellent	Very	Excellent	Very	Very	Very	Very	Excellent	Yes
	-		-	-		Confident		100
	Satisfied		Kelevant	Effective	Eusasius	Confident		
Good	Satisfied Satisfied	Fair	Relevant Relevant	Effective Effective	Engaging Engaging	Neutral	Good	Undecided
	Satisfied		Relevant	Effective	Engaging	Neutral		
Good Excellent	Satisfied Very	Fair Excellent	Relevant Very	Effective Very	Engaging Very	Neutral Very	Good Excellent	Undecided Yes
	Satisfied		Relevant	Effective	Engaging	Neutral		
	Satisfied Very		Relevant Very	Effective Very	Engaging Very	Neutral Very		

Appendix C Questions to PhD Participants

1.	Name	
2.	Where are you from?	
3.	How many languages are you fluent in and what are they?	
4.	Were you one of the best in your class at school?	
5.	What year did you start your undergrad degree?	
6.	What was your undergrad degree in?	
7.	Did you complete a master's degree?	
8.	What was that in?	
9.	Have you a PhD?	
10.	What year was your conferring?	
11.	What was the area of expertise/research for your PhD?	
12.	Tell me as a lay person what it was about?	
13.	What area are you in now?	
14.	What is your job title?	
15.	In which College or Centre are you located?	
16.	Do you have a grant in your own name?	
17.	Did you ever have a grant in your own name?	
18.	Have you written grant proposals?	

19.	How many approx?	
20.	Do you work with large data sets?	
21.	Have you programming languages, good IT skills?	
22.	Do you manage research grants like budgets, deliverables?	
23.	Have you managed teams or individuals?	
24.	Have you organised conferences/seminars?	
25.	Have you made many presentations?	
26.	Do you seek out training in transferable skills?	
27.	Are you encouraged by your line manager to seek out training?	
28.	Have you ever received career advice from your line manager?	
29.	If yes – what was it?	
30.	How many years (inclusive of your undergrad) have you been in academia?	
31.	Do you connect with industry in any way through your work in UCC?	
32.	Have you ever worked outside the university?	
33.	Have you ever had a part time job outside the university?	
34.	What did you do?	
35.	Did you enjoy it?	
36.	What did you learn from working that job?	
37.	What were your career expectations as an undergrad?	

	Why did you decide to do a PhD?	
	Why did you decide to do a Post Doc?	
	What type of position are you aiming for now?	
	What are your career expectations now and have they changed over the years?	
	Other than your area of research expertise what do you think you could bring to a prospective employer?	
	Would you like to move beyond academia?	
	Have you applied for positions beyond academia?	
	If yes what were they and did you get to the interview stage?	
	Would you feel comfortable about moving beyond academia?	
47.	Is this option b, c or d for you?	
	Whatever your answer here: Why?	
	What do you hope to gain/learn from attending this programme?	
	Are you happy for me to keep your information and track your career for the next 2 years?	

Appendix D Odyssey Agenda

Online Odyssey Programme Dates (2 Days)

Day 1

9-9.30am: Personal Introductions (Mary O'Regan/Dr Jay Chopra)

- Getting to know each other: Interactive, fun approach
- Getting to know Mary Mary's Career Story
- Getting to know Jay Jay's story: PhD to Postdoc to Industrial Researcher to Corporate Leader to Entrepreneur

9.30-10.00am: Why Are You Here? Expectations (Dr Jay Chopra)

- Facilitated group expectations exercise to understand participants' reasons for attending.
- Interactive group exercise to understand the current career ambitions of each participant.

10-10.30am: Researcher Career Trajectory - The Facts (Mary O'Regan)

• What does it look like on the ground? The numbers

10.30am-11.30am: Impact on Your Career Ambition? (Dr Jay Chopra)

- Debrief discussion of the research career trajectory facts what does this mean for your future career ambition?
- Discuss Fear and Personal change
- Set-up break personal activity on fear and personal change

BREAK (+ Self-directed activity)

2-2.15pm (Dr Jay Chopra)

Welcome back & check-in

2.15-3.45 pm: Organisational Cultures Beyond Academia – Skills and Success Measures (Dr Jay Chopra)

- Describes skills, attitudes and behaviours valued in other organisations
- Describes success measures in other organisations (Uses whole-brain, Herrmann Brain Dominance Instrument to facilitate this discussion)
- Brainstorm potential personal careers options based on personal skills/interests
- Develop personal skills development plan

3.45 - 4.00pm: Break

4.00 to 4.30pm: Speaker 1 Who Made Successful Transition Beyond Academia (Q&A Interview Approach)

From Humanities area

4.30 - 5.00pm: Provide Instructions for Overnight Assignment (Dr Jay Chopra) and Day 1 close-out discussion (all)

Day 2

9-9.30am: Where Are We Now....? (Dr Jay Chopra)

- Activity to facilitate day 1 reflection
- Debrief overnight activity
- Revisit your career ambition has it changed?

9.30-10.15am: Opportunities for Researchers Beyond Academia (Mary O'Regan)

• Overview of the many career options beyond academia

10.15-10.30am: Break

10.30 am-12.30pm: That's the Job! (Fionnan O'Sullivan)

- Understanding how the recruitment process works story from the other side. A day in the life of a HR
 professional/recruitment consultant receiving, screening, grading your CV
- Technology how applications are won and lost
- Branding banish the fear, LinkedIn, social media one small part of the process
- Networking...it's not all cocktail parties do you like coffee?
- Working with a recruitment partner what's real?
- Interviews techniques fail to prepare, prepare to fail!
- Q&A

12.30 -1.00pm Enterprise Ireland

1.00 -1.45pm: BREAK

1.45 -2.45pm: Speaker 2 Senior Talent Acquisition Manager - Global Business Solutions Eli Lilly (Q&A)

2.45-3.30 pm: Interview techniques (Dr Anne Gannon)

3.30 to 3.45 pm: Break

3.45 to 4.15: Speaker 2 Who Made Successful Transition Beyond Academia (Q&A Interview Approach)

• From Medicine and Health area

4.15 to 5.000pm: Bringing it all together (Dr Jay Chopra)

- Develop a personalised career action plan for each participant.
- Uses whole-brain approach.