

# Empowering a Global Community Through Co-Production of a Connected University Research Culture

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## Abstract

*Heriot-Watt University (HWU) is a global university with five academic Schools connected across five campuses. To foster a vibrant and inclusive research culture across the global research community, HWU has invested time and resource to strategically improve research culture, building on current strengths, while addressing cultural challenges faced by the research community. We have engaged all members of the community through a lengthy consultation and co-design process to co-produce a global action plan. The global community has a forward looking, unconstrained and ambitious future vision of what an ideal research culture at HWU should look like, and there are gaps between that vision and the diagnostic of perceptions of the 'as-is' culture. The action plan will drive forward an active strategy for supporting the research community. This paper gives an overview of the action plan development process using Lippitt and Knoster's Model of Complex Change as a framework, sharing the key themes that emerged from consultations, plans for moving ahead, reflections on the successes and challenges, with a focus on how to foster research culture and connect a global university.*

**Keywords:** global university; research culture; inclusive culture; consultation; co-design; co-production

## Introduction

Like many other universities in the UK context, Heriot-Watt University recognises that ‘research culture is a crucial cornerstone of research excellence’ (Whalley & Rowe, 2024) as there is evidence to show a significant relationship between research culture and research outcomes (González-Díaz et al., 2022).

Research culture (RC) is a complex and multi-layered eco-system that ‘encompasses the behaviours, values, expectations, attitudes and the norms of our research communities’ (Royal Society, 2024). RC cannot be done *to* people; it cannot be changed from the top-down. Systems and structures and support mechanisms need to be changed so that people engage and participate so behaviours and norms shift, and this is what leads to culture change *by* people (Lippitt, 1987). Thus, in order to engage people in behavioural change an inclusive RC needs to be one that is: bottom-up; empowering; nurturing; values all contributions; and provides formal and informal opportunities to discuss research. To foster a vibrant RC across our campuses, five academic Schools, professional partners and career stages, in 2022 Heriot-Watt University (HWU) made a strategic decision to invest resource in developing a focused strategy around RC.

One of HWU’s unique selling points is the interface between RC and the strong enterprise culture in the university, so our goal is to foster a vibrant, inclusive and *enterprising* RC. An enterprising university is one which embraces creative innovation, entrepreneurship, and industry engagement that leads to tangible impact on society and the economy, while fostering a strong culture of research, teaching, and learning. Given the profile of HWU as a globally connected university with a strong interdisciplinary and entrepreneurial outlook, the focus is on aligning our RC work with the HWU Enterprise Team in fostering and promoting an *enterprising* RC, as the ethos is that all members of the research community could be identifying opportunities to foster and contribute to a vibrant RC.

This paper therefore gives an overview of our work to date, key themes that emerged from the consultations, and plans for moving ahead, with a focus on how to connect a global university. We have structured the paper and the description of the process using a framework that follows three themes: The Map, The Model, The Territory (Korzybski, 1933). Recognising that the map can never represent the reality of the territory (Dalcher, 2018), it can nonetheless form a useful starting point to reflect on the geographical and cultural complexity underpinning a thriving RC enacted by a community that spans the globe. Two key models were used to bridge from geography to action: first, a thematic examination centred on five common components of academic research, and the second viewed the

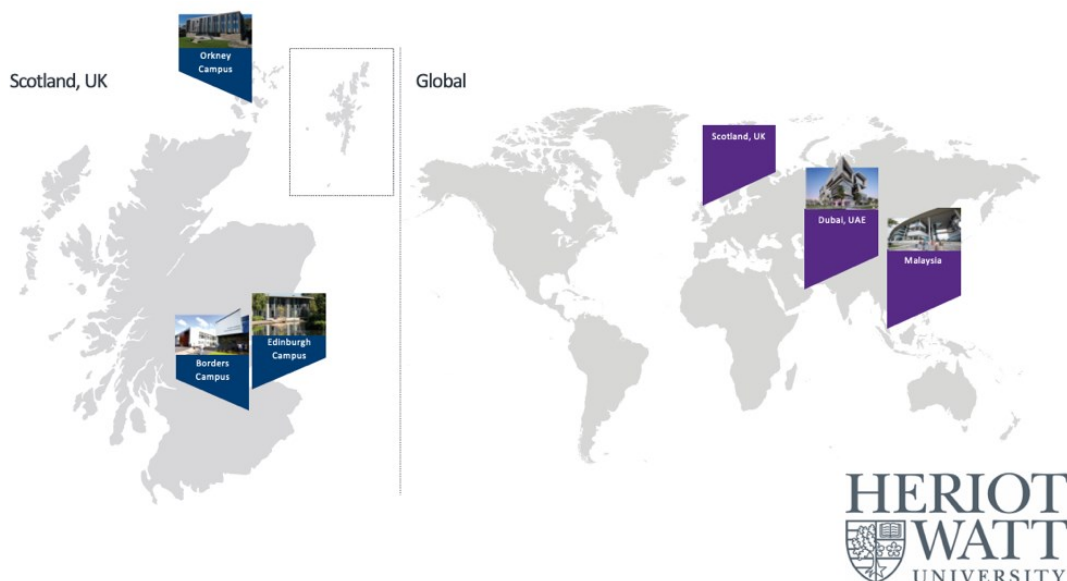
process of achieving our global community's vision of an enterprising RC through the lens of complex change.

Change projects are located within a worldview and theoretical frame. Lippitt's framework for managing complex change (Lippitt, 1987) modified by Knoster (1991) is frequently cited. This model identifies six conditions for achieving sustainable change: (i) vision, (ii) consensus, (iii) skills, (iv) incentives, (v) resources, (vi) action plan. Now often referred to as the 'Lippitt-Knoster Model for Managing Complex Change' (Luhring, 2022), the model presents a framework for identifying risk if the six conditions are not met. We recognise that change is more complex than this, but an awareness of such conditions can be helpful in planning and facilitating culture change in a globally connected university. As such, a participative co-production approach was adopted to build trust, transparency and commitment to engage in sustained culture change at HWU. Our systemic approach of co-production referencing Lippitt and Knoster's Model has helped to keep the difference and complexity of all the campuses and locations in view, whilst offering a practical way to navigate through and guide resources and actors.

### **The Map: A Flourishing and Purposeful Globally Connected University Community**

In order to contextualise the nature of our globally connected university it is worth presenting a map of our university locations, our governance and strategy. HWU is a global university with five academic Schools that have research capabilities<sup>1</sup> connected across five campuses: three in Scotland (Edinburgh, Galashiels, Orkney), one in Malaysia and one in Dubai, as illustrated in **Figure 1**.

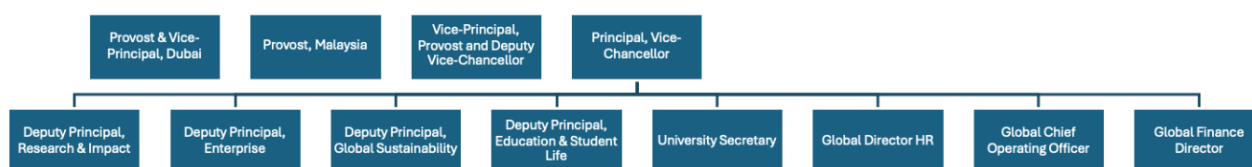
*Figure 1: Map of HWU locations (Image © HWU, 2024 and included with permission)*



A global university linked by common values across different geographies, HWU occupies a rare position from which to explore RC as we can draw on the different strengths of each campus across all locations and countries. Every campus (and person, research group etc.) starts from a different place, so we have engaged all members of the community (see Appendix) through a one-year process of consultation, including surveys, focus groups and co-design workshops, to co-produce a global action plan. HWU considers that the research community includes: core academic staff; postdoctoral researchers; research assistants; postgraduate research students; research/lab technicians; and research and engagement support professional partners.

The university executive is HWU’s primary decision-making body that includes senior level representation from all three countries (see Figure 2). The university has a clear research and operational governance structure in place, with various committees and working groups focused on delivering the university strategy. HWU’s Strategy 2025 (HWU, 2019) has four strategic themes: (1) building flourishing communities; (2) pioneering in education, (3) excelling in research and enterprise; and (4) being a global, connected university. In addition to the challenge of recovery after the Covid-19 pandemic, one of the key challenges faced by the university in delivering the research strategy is the uneven distribution of research excellence across the three country campuses, with the lion’s share of research activity being located on the Edinburgh campus; primarily due to the fact that the research funding landscape is very different in the UK and more government funding is available. Although this is a challenge in traditional research funding terms, a multi-country-campus university presents opportunities for research entrepreneurship as there are many other pathways to research funding through industrial/business partnerships in Dubai and Malaysia.

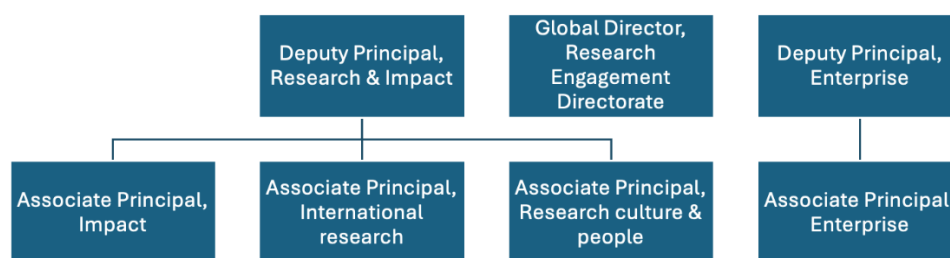
*Figure 2: HWU Governance Structure*



In terms of RC management, in 2022 the new post of Associate Principal of Research Culture & People (AP-RCP) at HWU was created to provide leadership focus on improving RC, building on current strengths, while addressing cultural challenges faced by researchers. These include, but are not limited to, equality of opportunity, personal wellbeing, inclusivity, and career fulfilment. Reporting to the Deputy Principal for Research and Impact, and working closely with the Global Director of Research

Engagement, the AP-RCP works in a team alongside three other Associate Principals (see **Figure 3**). The post originated from recognition that visible academic leadership was needed; to scale up the capacity of the Deputy Principals; to signal the importance of culture and people to achieving the ambitions of Strategy 2025 (HWU, 2019); and drive forward not only the research excellence strategy but also ensure that RC is embedded in strategic themes to build flourishing communities and to being a global, connected university.

*Figure 3: Research Culture Management Team Structure*



Also, the role of the AP-RCP, in collaboration with a newly established post of Researcher Development Consultant for Research Culture, is to support the newly formed Research Culture Working Group (as a working group of the Global Operations Executive), which brings together senior professional partners and academics to work in partnership. The Working Group has the remit and mandate to open out/extend whose voices are heard, and who can influence and direct change; and undertake work to help fulfil the ambition of creating a more positive and inclusive working culture for our research community within which excellent and impactful research can take place and a vibrant and inspiring RC can be experienced by all our researchers in our globally connected university across all campuses.

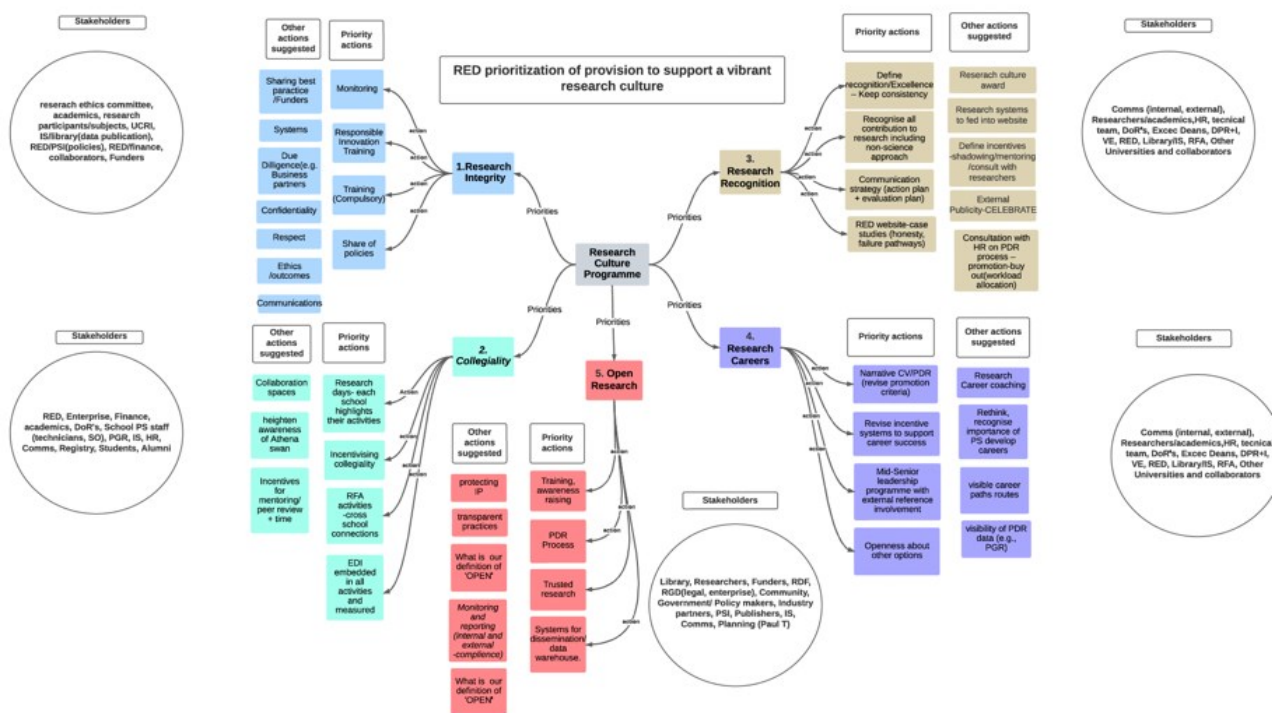
The mapping of RC structures at HWU is helpful in enabling decisions and facilitating forward movement and progress, even in challenging contexts: ‘The process of mapping, as opposed to blindly following a map, enables reasoning and adjustments to emerge so that corrections can facilitate improved performance and a more purposeful journey’ (Dalcher, 2018: 1). Before the full RC structure was established, the Global Director of the Research Engagement Directorate (RED) led the initiative to developing an initial model to take the RC work forward. RED encompasses four divisions with professional partners that provide support and assistance to researchers with the development of research proposals and bids to working with industry on R&D and knowledge exchange projects and public engagement.

## The Model

### The first model

A sub-set of the RED team were involved in a two-part workshop process to anticipate what RED might need to deliver in order to support the School research strategies. Part 1 involved a review of the draft School research strategies, and part 2 focused on developing the model. There was a clear intention behind this: the University of Glasgow (UoG) had already established a reputation for having progressed a model of good practice in RC. Their resources were open<sup>ii</sup>, and their proposed themes seemed like a reasonable map to consider a RC programme at HWU taking into account the local context. So, the second part of the workshop involved a translation of the established UoG themes into actions and stakeholders, in order to anticipate what might be needed to deliver and support the HWU research excellence strategy, and in particular, to help the Schools identify actions as part of their own research strategies. On reflection, this initial workshop turned out to be a rather accurate predictor of what have eventually been recognised as action plan priorities for HWU. As such, the first model of HWU RC identified five priority themes that could be the potential focus of a RC agenda, that mirrored the UoG themes: (1) Research Integrity; (2) Collegiality; (3) Research Recognition; (4) Research Careers; and (5) Open Research. These themes were mapped out to give consideration to potential priority and other actions and key stakeholders for each theme, as seen in **Figure 4**.

Figure 4: The first model – 5 priority themes (Image © RED, 2022 and included with permission)



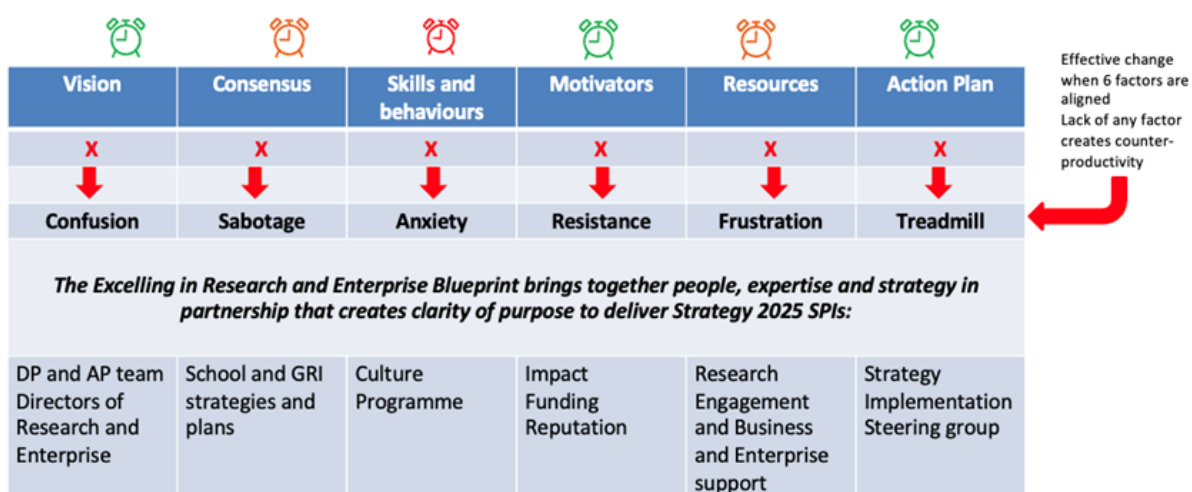
This first model provided the initial foundation for discussion of what is meant by RC generally, and at HWU specifically, and a useful touchstone for reference as the RC work progressed. The first model was viewed as a good starting point from which to explore what is meant by RC, using key concepts – *research integrity*, *research recognition* and *open research* that describe critical aspects of the research production process together with the personal and social expectations of researchers (*collegiality* and *research careers*).

*The second model*

The strategy to excel in research and enterprise can be seen as a model of complex change in Lippett and Knoster’s terms, as well as a foundation of, and blueprint for, change. So, it was important for us to consider how we can work across all of our university community to align the RC.

Using Lippitt and Knoster’s model for managing complex change, we then developed a second model by reviewing their suggested six conditions for achieving sustainable change (see Figure 5). The second model is orientated towards considering the development and delivery of our Excelling in Research and Enterprise strategy as a process of complex strategic change. The RC programme is seen as a means of influencing and aligning skills and behaviours in service of the goal of delivering excelling in research and enterprise. The model also offers a perspective that aims to view RC as a process of complex strategic change; taking into account the organisational, behavioural and strategic rationale in a systematic way. It offered us a tool to form a realistic assessment of the

Figure 5: The second model (Image © RED, 2022 and included with permission)<sup>iii</sup>



Developing these models was a proactive way to envisage what the possibilities might be for fostering a vibrant RC at HWU, and to connect culture with strategy. But the next stage was the most critical part of the process: to engage in a method of consultation to translate the model so

that it was meaningful for the HWU research community; to examine the model in the territory, that is, with the HWU research community in the context of HWU as a globally connected university. The models provided us with the vision, but we needed to see if we had the consensus, skills, incentives, and resources needed to develop a meaningful, achievable and sustainable RC action plan.

### **The Method – from Map to Model to Territory**

The map-territory relation refers to the association between the map, as the representational output of the mapping process, and the object being studied, or the actual, physical territory (**Dalcher, 2018**). A map does not equate to the actual territory it represents. However, when accurate, it mirrors the structure of the territory, hence its practicality and utility (**Korzybski, 1933**). As such, we sought to engage in an agile process that would translate the RC map and the models to the territory (the context) of HWU.

HWU's ethos is that we put our community of students, staff and alumni at the heart of everything we do by adopting person-centred approaches in the development of policy and strategy and involving the HWU community in consultations, feedback and decision-making. It is recognised that adopting agile practices that have been traditionally used in business and software development to get regular feedback to optimise outcomes can be effectively applied in higher education with students and teaching practices (**Schön, Buchem & Sostak, 2022**). Core agile practices highlight the importance of: people and teamwork; shared visualisation systems; iterative cycles of development; a lead facilitator; and a workflow tool for the transparent documentation of activities and reflections on progress (**Hidalgo, 2018**). As such, an agile framework can also be applied to research practices (*ibid*) and to the development of RC (**Shaw, Errington & Mellor, 2022**).

Recognising that fostering a positive RC cannot happen quickly (**Casci & Adams, 2020**), and adopting the principle of slow scholarship (**Karkov, 2019**), we engaged all members of the research community through a slow, agile, one-year process of consultation and iterative feedback in order to carefully examine the RC landscape at HWU. Hence now we shall focus more closely on the process; what we did and our learning along the way.

From the outset we approached the consultations as a partnership piece with inclusivity at the heart of everything we did; a team endeavour blending together academic and professional partner credibility to include the whole of the HWU research community.



The consultation process used a mixed-methods approach, combining different qualitative and quantitative methods (Creswell, 2013) to examine RC at HWU through different lenses to gain deeper, more complex insights and thus broaden the scope of our work. The methods used included surveys, focus groups and co-design workshops, to co-create a global action plan and embedded principles of equality, diversity and inclusion in the research eco-system to ensure that marginalised researchers were actively encouraged to participate and all consultation stages were accessible and inclusive. The stages were as follows:

*Stage 1- Scoping of 'ideal' research culture*

School-level hybrid workshops were held inviting the research community in each academic School to participate in brainstorming what an ideal RC would look like at HWU, what has already been done and what they thought was needed, using creative in-person and online methods (such as Padlet) to map out the key themes.

*Figure 6: Research culture consultation in action (Image © Catalina Bastidas, 2023 and included with permission)*



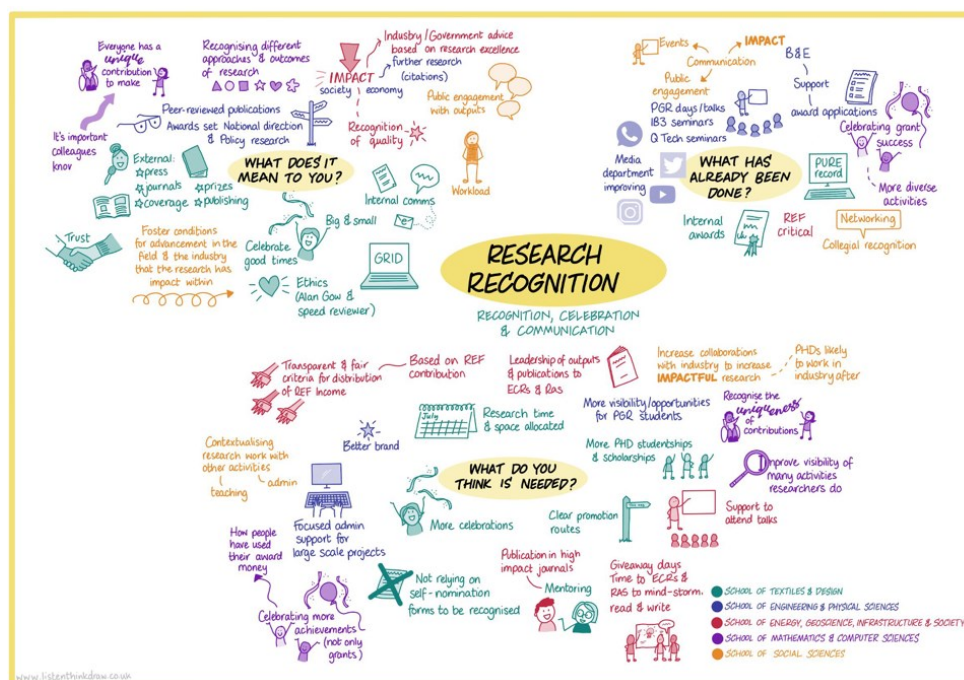
Seventy-six participants were involved in-person during visits to the Borders campus and four Schools on the Edinburgh campus, and online from the Dubai and Malaysia campuses (see Appendix). The discussions gave a clear overview of the ideal RC, with artistic representations of the five strategic RC themes (see Figure 7 for an example of the artistic representation of the research recognition theme).

*Stage 2 - Diagnostic of 'as is' research culture*

Surveys and cross-disciplinary focus groups were externally facilitated by HEdway Group Ltd<sup>iv</sup> using UKRI (UK Research and Innovation) Funding Stabilisation funds to drill deeper into the research community's

perceptions of the current HWU RC and any specific suggestions for how to bridge any gaps between the reality and the ideal. Bringing in an independent facilitator for this part of the consultation was felt to be the best way to encourage the research community to open up and be truthful about their current research cultural experience. A survey which was administered by the Wellcome Trust in 2020<sup>v</sup> that elicited information from researchers across the UK about what they thought about the culture they worked in, was adapted for the HWU context and distributed online. Respondents who expressed interest in being further involved were invited to participate in follow-up focus groups held in person in Edinburgh or online. Costs for researchers from Borders and Orkney campuses were covered for them to attend in person in Edinburgh, while Dubai and Malaysia researchers participated online. We received 286 survey responses, and 58 participants attended the focus groups in-person or online (see Appendix). The focus groups led to 129 suggestions for things that could be done at HWU to improve the RC, which were mapped against the five RC strategic themes.

Figure 7: Artistic representation of research recognition



### Stage 3 - Co-creation of action plan

In person and online workshops were held with all five academic Schools and on all five campuses over a 3-month period to discuss key findings from Stages 1 and 2 and prioritise actions and next steps. Plus, five task and finish (T&F) groups were established as sub-groups of the Research Culture Working Group, focusing on each of the strategic RC themes (see Appendix). Participants in workshops were asked to prioritise the 129 suggestions, and the T&F groups were asked to consider theme-specific

key findings and outcomes from the consultations, to give recommendations and suggested next steps.

This 3-stage method empowered and enabled the research community to feel globally connected, involved and committed to participate in fostering a positive and inclusive RC. As noted earlier, working in an agile, collaborative, iterative way allowed us to use a diversity of approaches to draw in the whole, global HWU research community to co-create from the bottom-up an action plan that is transparent, meaningful, realistic and achievable.

### **The Territory**

So, what does the RC territory look like at HWU? It is evident from the consultations that identifying RC in the HWU context is complex. As a globally connected university there are many examples of good practice across different parts of the university. But there are more actions that can be taken to foster not one but many research cultures across the institution and bring in the different strengths of each campus and the focus on an enterprising RC. As the university is located in different territories (countries) and research funding landscapes, the research cultures are inherently linked to the local (campus, School, discipline, research group) as well as global territories.

Nevertheless, the consultations did give rise to a clear consensus that one of the unique selling points (USPs) of HWU RC is that we are a *unique, enterprising, inclusive, global* university that conducts *interdisciplinary* research that generates new *knowledge* that can be *applied* to create real-world *impact*. The working definition of RC at HWU can be seen in **Table 1**.

*Table 1: Working definition of research culture at HWU*

<p>Heriot-Watt University endeavours to foster, maintain and support a positive, vibrant and enterprising research culture. In line with the HWU research strategy priority themes of <i>excelling in research and enterprise, building flourishing communities</i> and <i>being a global, connected university</i>, at HWU we strive for a successful, enterprising research culture that:</p> <ul style="list-style-type: none"> <li>• is ambitious, dynamic, agile, innovative, exciting, open, and communicative;</li> <li>• is collegiate and collaborative;</li> <li>• promotes ethical behaviours in a well-balanced research and innovation environment;</li> <li>• embeds equity, diversity and inclusivity;</li> <li>• enables career development and research excellence by members of the community at different career stages;</li> <li>• creates impacts for research, society, industry, and academia</li> </ul> <p>Aligning with our university values, we seek to embed an enterprising research culture that promotes a sense of connectness and <i>belonging</i> across the whole research community, <i>celebrates</i> holistic research success, enables <i>collaboration</i>, and <i>inspires</i> the research community to do and support the best research they can do, and be the best researchers they can be.</p>
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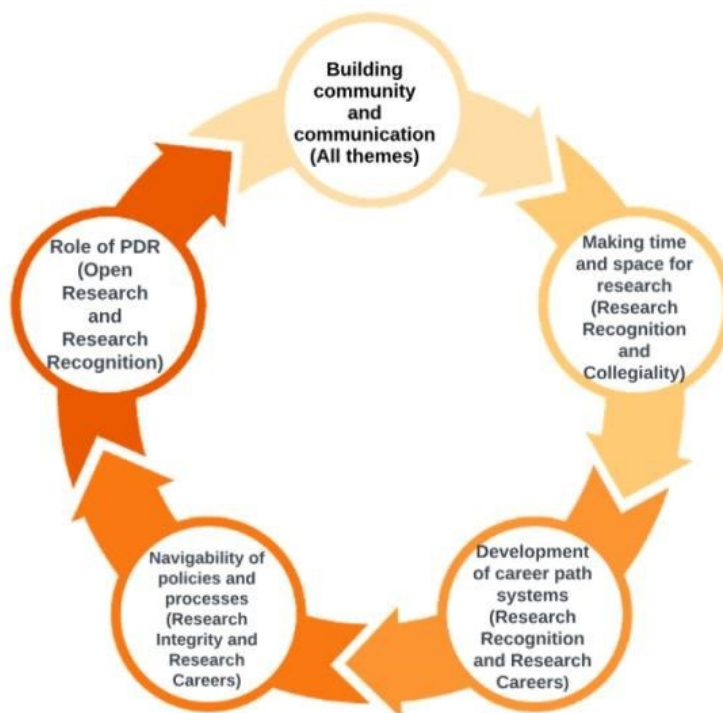
Key concerns that were raised by the HWU research community were the depletion of connection across the university in the post-Covid pandemic era, and erosion of time to do research due to competing demands from teaching and administration. This gave rise to the identification of salient issues that need to be addressed in order to foster a positive and inclusive RC, as seen in **Table 2**.

*Table 2: Salient issues identified to foster research culture at HWU*

A workload model that appropriately recognises time for research.
Opportunities to encourage collaboration and nurture collegiality.
Improved communication processes.
Review of systems and processes to support research and career development.
Celebrating research in many different ways.

As such, we have been able to identify priority actions for HWU, as seen in **Figure 8**.

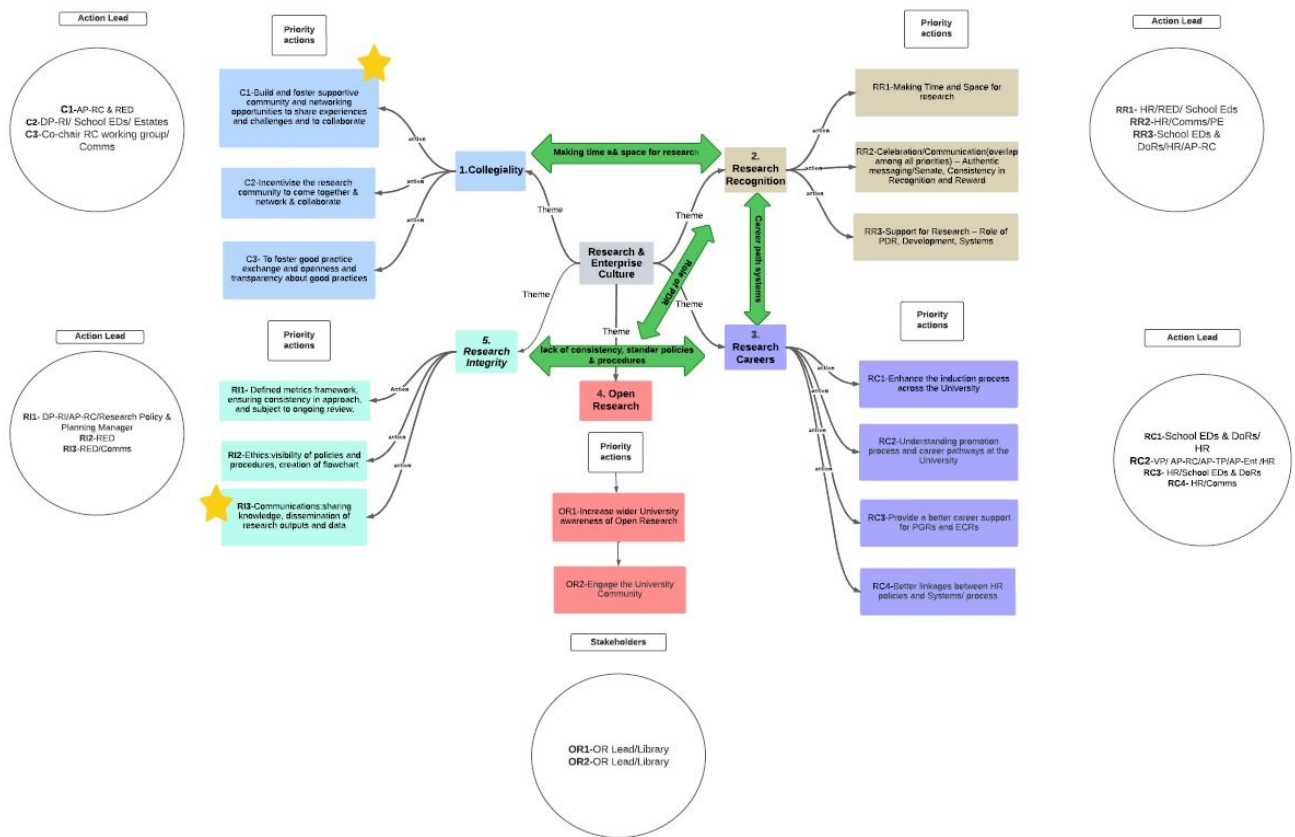
Figure 8: Priority actions for HWU



The culmination of the 3-stage culture work is a bespoke, living action plan for HWU that has been co-created with the HWU research community and incorporates short, medium and long-term goals. The global HWU community has a forward looking, unconstrained and ambitious future vision of what an ideal research and enterprise culture at HWU should look like, and there are gaps between that vision and the diagnostic of perceptions of the ‘as-is’ culture. The action plan seeks to highlight work that is already being undertaken at HWU, implement new initiatives that will address the gaps identified through the consultation process, and drive forward an active strategy for supporting researchers.

The action plan aligns with HWU’s values and research strategy and its ongoing commitment to the principles of the Concordat to Support the Career Development of Researchers<sup>vi</sup> and the plans as outlined in the HWU Concordat annual reports<sup>vii</sup>. The plan maps (on average) 3-4 actions against each of the five RC strategic themes, along with suggested ways to measure whether actions have been achieved, who are the key stakeholders and which locations (campuses) across the university that the actions are most pertinent to. As a consequence, the resulting model of HWU RC updates the first predictive model (**Figure 4**) to link the themes to actions and stakeholders (**see Figure 9**).

Figure 9: The resulting model (Image © RED, 2023 and included with permission)



## Reflections

On reflection, it is important to mention the challenges we have experienced, such as the difficulty in getting researchers to commit, since it is often the same people who are keen to come forward and collaborate. It is also difficult to break a culture that is based on 'award' or 'incentives' and not all members of the research community who think about 'giving' for the benefit of their community without expecting anything back. The number of participants in the three stages might seem small compared to the size of the research community, but in reality, there was a much higher response rate to previous staff surveys, so we were pleased to see the level of engagement from the research community on RC issues.

The burgeoning momentum behind the cultivation of a robust RC within our global university community has underscored the critical need for enhanced support structures within our Schools. Recognizing this imperative, efforts have been directed towards aligning School strategies with the overarching objectives of the RC movement. To facilitate this alignment and ensure effective monitoring of action plan progress, the allocation of resources has been sought to hire three dedicated research culture coordinators. These coordinators, positioned within the Schools,

will serve as pivotal conduits in supporting the fulfilment of objectives outlined in the action plan, as garnered from the research community.

Furthermore, in acknowledgment of the intricate interplay between the RC action plan and the HWU Athena Swan Bronze Action Plan, collaborative initiatives have been initiated with the Equality, Diversity, and Inclusion (EDI) team at HWU. Drawing insights from the UKRI funded EDI Caucus project<sup>viii</sup> that is led from HWU, we aim to cultivate inclusive research environments that empower a diverse spectrum of researchers. This strategic collaboration seeks to create conducive environments where researchers from diverse backgrounds, including women, disabled individuals, LGBTQIA+ communities, racial minorities, and those with caring responsibilities, can thrive and contribute meaningfully to research and innovation careers.

In tandem with these efforts, the establishment of a dedicated RC fund has been identified as crucial to promote activities aimed at fostering the RC across the university. Such initiatives signify a commitment to fostering an environment conducive to research excellence and innovation. Critically, culture should not be viewed as disconnected to research quality and strategy. Moving forward, the realization of these objectives will necessitate the formation of a more structured team for RC. By leveraging collective expertise and collaborative partnerships, we aspire to cultivate a vibrant RC that nurtures entrepreneurship, inclusivity, diversity, and excellence.

## **Conclusions**

In revisiting the Lippitt-Knostrer model for managing complex change, we will review the six key areas that are required for sustainable change. Through an initial process of consultation across all disciplines, campus locations, research roles and career stages, HWU was able to develop a *vision* (1) of the ideal RC for the university. Further consultations through surveys and focus groups led to a *consensus* (2) on a definition of RC at HWU; and co-production of the identification of the *skills* (3), *incentives* (4) and *resources* (5) required to foster a vibrant, inclusive and enterprising RC. A final stage of cross-campus discussions involved the HWU research community in the co-design of an *action plan* (6), with clear themes mapped against the university values and research strategy, with tangible goals and suggested measures.

The agile framework and the methods we have used have placed our research community at the heart of the process. The action plan will drive forward an active strategy for supporting the research community, so we see this process as just the beginning of our RC journey. The Research Culture Working Group will oversee the implementation of the plan, as

well as the provision of a RC programme, which has already begun in earnest. For example, we have already launched a RC Café Series including panels and workshops related to the RC themes, begun to deliver Narrative CV workshops, the good practice exchange and facilitate discussions about Nature Masterclasses on research-related topics, and are offering regular dedicated virtual writing sessions for all researchers including PhD students.

In order to ensure that the action plan is implemented we need to encourage the whole university to engage with the plan and take steps to effect change. So, we will ensure that the action plan feeds into School research strategies, and we will also recruit a network of RC champions across the university and all its campuses to create a strong RC throughout the global university, and to contribute to the development of others.

Furthermore, we plan to develop our own RC indicators so we can measure positive shifts (such as increased engagement in RC activities, more promotions, etc.) or negative shifts in the RC (e.g., reduction in number of research proposals, workload model not being fit for purpose, etc.). Although (like everyone else) we are waiting for REF2029 People, Culture and Environment indicators, we believe that, as stated by Whalley and Rowe (2024), it is important to adopt an approach 'where institutions can recognise, address, and assess research culture challenges within their unique contexts'. Using the INORMS SCOPE Framework<sup>ix</sup> for responsible evaluation will be critical in developing indicators that are positive and supportive, and that help us to evaluate positive shifts in RC, measure research excellence and provide insights into where more work needs to be done.

We would recommend this approach to other universities who are considering their own RC work. It is intensive, takes time and has its challenges, but our estimation at this early stage is that it is worthwhile because it empowers the research community to foster the RC that they want to see. This method of consultation and research community engagement allows universities to identify priorities for research culture and research excellence in an inclusive way.

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## Acknowledgements

We would like to thank the HWU research community for their participation throughout each stage of the research culture consultation process. It would not have been possible to co-design such a robust action plan without the level of engagement we had. Furthermore, would like to acknowledge the work of Craig Walker and the HEdWay Group Ltd for their independent, expert assistance with the Stage 2 consultations through adapting and administering the survey, arranging and conducting the focus groups, carrying out the analysis and presenting a final report.

Professor Jemina Napier is Associate Principal of Research Culture & People at Heriot-Watt University, where she has the remit as academic lead to strategically support the university research community to foster positive and inclusive research culture(s). As Chair of Intercultural Communication in the Department of Languages & Intercultural Studies her research sits at the intersection of applied linguistics, interpreting studies, deaf studies and gender studies where she specialises in the study of mediated communication and linguistic accessibility for deaf communities. Jemina is a Fellow of the Academy of Social Sciences (UK) and Corresponding Fellow of the Australian Academy of Humanities.



Dr Fiona Armstrong is currently Global Director of Research Engagement at Heriot-Watt University, taking up the role in October 2019. Joining the University from UK Research and Innovation (UKRI) where she was Deputy Director of Community Engagement for UKRI's EU Exit Programme. Fiona joined the Engineering and Physical Sciences Research Council in 1999 and worked in a variety of roles across the Research Councils, including Knowledge Exchange, Research Capability and Organisational Change. Fiona's PhD is in Plant Biophysics and she is a Fellow of the Royal Society of Arts.



Catalina Bastidas joined HWU in 2018, and serves as a Researcher Development Consultant dedicated to enhancing Research Culture. Collaborating with the Associate Principal and the Working Group for Research Culture, she fosters solution-oriented research across HWU's global campuses. With over a decade of international development and research support experience, Catalina brings valuable insights to R&D partnerships. Holding degrees in Law and International Studies, her passion lies in equitable access to opportunities, and empowering communities through innovation and justice. Her experience has driven impactful change by catalyzing partnerships and translating research into viable projects, driving positive societal impact through academia.



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## List of Images

Figure 1: Map of HWU locations (Image © HWU, 2024 and included with permission)

Figure 2: HWU Governance Structure

Figure 3: Research Culture Management Team Structure

Figure 4: The first model – 5 priority themes (Image © RED, 2022 and included with permission)

Figure 5: The second model (Image © RED, 2022 and included with permission)

Figure 6: Research culture consultation in action (Image © Catalina Bastidas, 2023 and included with permission)

Figure 7: Artistic representation of research recognition

Figure 8: Priority actions for HWU

Figure 9: The resulting model (Image © RED, 2023 and included with permission)

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## List of Tables

Table 1: Working definition of research culture at HWU

Table 2: Salient issues identified to foster research culture at HWU

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## Appendix

This appendix provides tables and figures outlining the involvement of the HWU research community in different stages and aspects of the research culture consultation process.

### Research Culture Working Group: By role and discipline/affiliation

Role in community		Discipline/University Affiliation						Total
		School: EGIS	School: EPS	School: MACS	School: SoSS	School: SoTD	University-wide	
Research support/ Professional partners	RED						5	10
	HR						2	
	Information services						1	
	Technician	1	1					
Academics	Professor		4	1*			5**	9
	Associate Professor	1		1	1***			3
	Assistant Professor					1		1
Researchers	PGR		2					2
	PDRA					1		1
<b>Total</b>		<b>2</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>13</b>	<b>27</b>

\*This Professor was also the co-chair of the research culture working group

\*\*These Professors were representing the research degree & ethics committees, or as Associate Principals, not their disciplines

\*\*\* During the consultation this academic was promoted to Professor

### Research Culture Working Group: By role and campus location

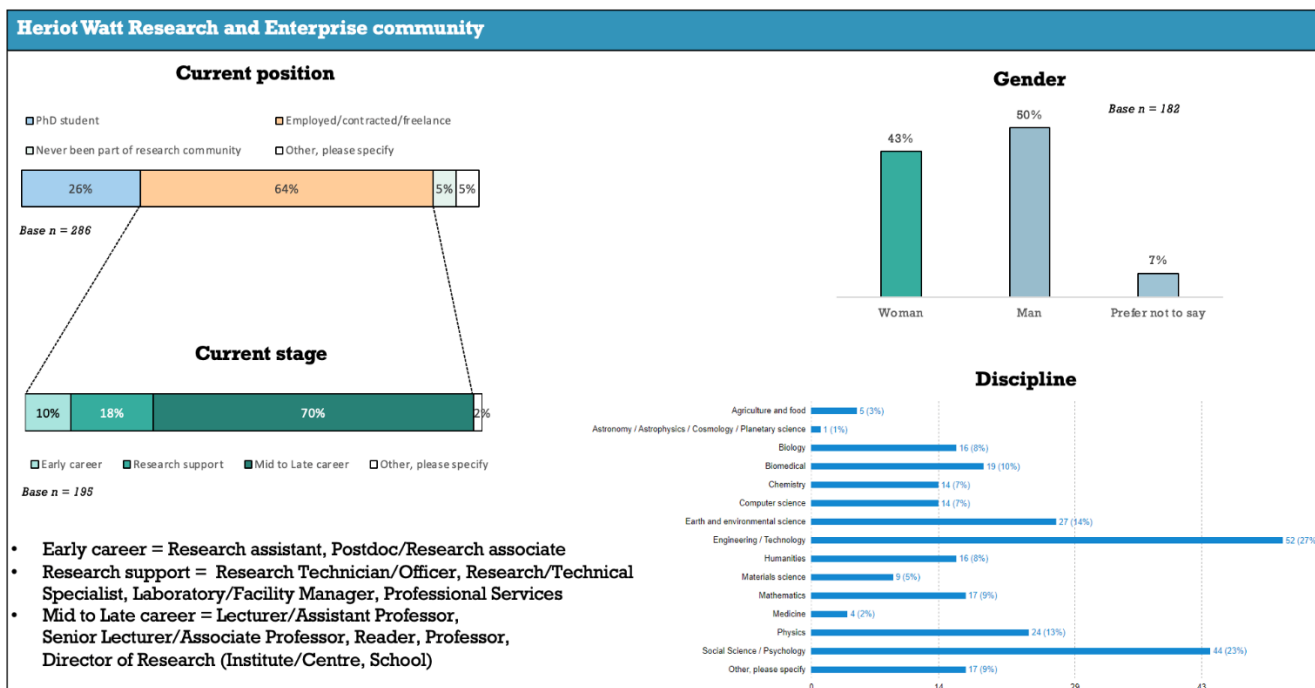
Role in community		Campus: Edinburgh	Campus: Dubai	Campus: Malaysia	Campus: Galashiels	Campus: Orkney	Total
Research support/ Professional partners	RED	5					10
	HR	2					
	Information services	1					
	Technician	2					
Academics	Professor	8	1	1			9
	Associate Professor	3					3
	Assistant Professor				1		1
Researchers	PGR	2					2
	PDRA	1					1
<b>Total</b>		<b>24</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>27</b>

Stage 1 consultation participants: Hybrid meetings with Schools

Role in community		Discipline/University Affiliation					Total
		School: EGIS	School: EPS	School: MACS	School: SoSS	School: SoTD	
Research support/ Professional partners	RED						
	HR						
	Information services			1	1	1	
	Technician	1	2		1	1	
Academics	Professor	6	7	7	4	2	
	Associate Professor	1	1	3	4	3	
	Assistant Professor	1		1	6	5	
Researchers	PGR	1	2	2	1	3	
	PDRA				1	1	
	Research assistant	3	2		1		
<b>Total</b>		<b>13</b>	<b>14</b>	<b>14</b>	<b>19</b>	<b>16</b>	<b>76</b>

Stage 2 consultation participants: Survey

HWU respondent Demographics: career stage, gender and discipline



*Stage 2 consultation participants: Focus groups*

Participants were not asked to reveal which School/professional services team they were aligned to in order to remove this identifier as a barrier for anyone for whom anonymity was of high importance. Thus, this table reveals only roles (Technicians were grouped with Research Support and Administration for similar reasons to preserve anonymity).

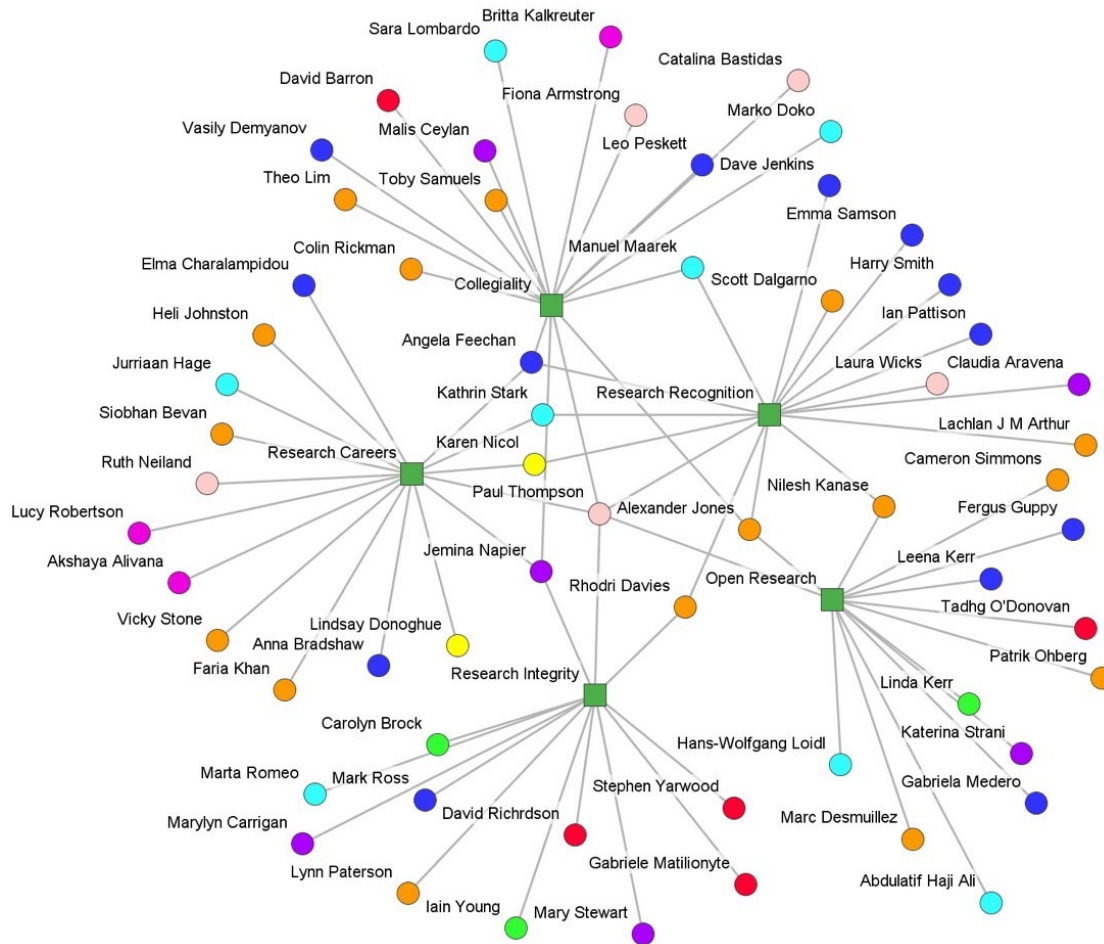
	Assistant Professor/ Associate Professor	Full Professor	PhD student	Postdoctoral Research Associate/ Research Assistant	Technician/ Research Support/ Administration	Total
FG 1 in person	2	3	2	1	4	12
FG 2 in person with BSL	2	1	3	1	2	9
FG 3 in person	2	1	3		7	13
FG 4 in person	4	1	2		2	9
FG 5 in person with BSL	2	1	3		2	8
FG 6 online	3	3	1			7
<b>Total</b>	<b>15</b>	<b>10</b>	<b>14</b>	<b>2</b>	<b>17</b>	<b>58</b>

*Stage 3 Consultation Participants: Co-design workshops*

Role in community	Discipline/ University affiliation									Total
	School: EGIS Edinburgh	School: EGIS Orkney	School: EPS	School: MACS	School: SoSS	School: SoTD Galashiel	Mixed School: Dubai	Mixed School: Malaysia	University-wide	
Research support/ Professional partners						1	1	2		
Academics	16	7	8	6	8	8	23	9		
PGRs	1	2	1	2	1	2	5	8		
PDRAs	1	1	1	1	2					
<b>Total</b>	<b>18</b>	<b>10</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>11</b>		<b>19</b>		

\*These workshops were run as drop-in sessions or Prof Napier attended research committee meetings. As such it was harder to determine the breakdown of roles of people in attendance, so in this table we give an estimation of the numbers who attended in each broad category of School or location.

Network analysis of volunteers in task & finish groups



- Green Square – theme
- Colour based on School discipline/affiliation
  - Red – other (groups only mentioned once; business & enterprise, Dubai, Malaysia, Research Futures Academy, ethics)
  - Blue – EGIS
  - Orange – EPS
  - Yellow – HR
  - Lime green – Information Services
  - Sky blue – MACS
  - Pale Pink – RED
  - Bright pink – SoTD
  - Purple - SoSS

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**Endnotes**

<sup>i</sup> Schools of: Mathematics & Computing Sciences; Energy, Geoscience; Engineering & Physical Sciences Infrastructure & Society; Social Sciences & Edinburgh Business School; and Textiles and Design; plus the Global College which functions as a 6th School and provides academic foundation and accelerator programmes to all undergraduate and postgraduate students on all campuses.

<sup>ii</sup> See <https://www.gla.ac.uk/myglasgow/ris/researchculture/researchcultureactionplan/>.

<sup>iii</sup> Key. DP – Deputy Principal, AP - Associate Principal, GRI - Global Research Institute. The alarm clocks represent ratings of level of risk (green – low risk, amber – medium risk, red – high risk).

<sup>iv</sup> HEdway Group Ltd are a network of researchers that partner with universities on strategic projects to enact positive change across systems and policies. HEdway had already worked with HWU on other strategic projects so after a tender process they were selected as the most fitting organisation to lead the consultation work as they were already familiar with the university. See: <https://www.hedwaygroup.com>.

<sup>v</sup> See: <https://wellcome.org/reports/what-researchers-think-about-research-culture>.

<sup>vi</sup> See: <https://researcherdevelopmentconcordat.ac.uk>.

<sup>vii</sup> See: <https://www.hw.ac.uk/uk/services/research-futures/resources/hr-excellence-research.htm>.

<sup>viii</sup> See: <https://edicaucus.ac.uk>.

<sup>ix</sup> See: <https://inorms.net/scope-framework-for-research-evaluation/>.