Learning from Early Career Researcher survey in Spring 2021

The data from which these findings arise was compiled from a survey developed by the SPRITE+ network and includes responses from Early Career Researchers (ECRs) in the SPRITE+, eFutures and Connected Everything networks.

For this survey, we focused on ECRs and a very broad definition was applied which includes PhD candidates, post-doctoral researchers and those in first/second lecture positions. As the survey was open to all members a small number of responses were also received from non-academics in industry.

A total of 69 responses were received by the networks. From these responses some key trends were identified:

a) **ECRs want to network with (listed in priority order):**
   1. Professional practitioners
   2. ECRs from own network
   3. ECRs from other networks
   4. Non-ECR academics

b) **ECRs would find workshops on the following topics useful (listed in priority order):**
   1. Contacting stakeholder groups to collaborate on research
   2. Use of small grants
   3. Top tips for publishing
   4. Writing funding applications
   5. Managing work-life balance
   6. Recruiting participants for research
   7. Developing a pitch
   8. Career insights / career planning

Overall summary:
Across the networks there was a common theme of *networking with non-academics/professional practitioners* which came through strongly. As well as industry, ECRs identified the following examples of other non-academic practitioners, who they would be keen to work with:
   1. End user of developed technologies (general public)
   2. Charities
   3. Funders / Venture capitalists

Many of the ECRs noted that they'd like support to help them establish industry contacts for joint funding applications. ECRs also raised the following topics, as areas they would like to receive more support:
- Multidisciplinary Challenges events - academics/Industry who would like help with a problem from other disciplines pitch their problem and outline where they would like input; which ECRs can engage with where their expertise and existing research compliments the project's need
- How to identify the right funding call for your multidisciplinary project and Leading your research to the next level
- Communicating with peers in other disciplines
- Trajectory (longer term) planning

What have we done with the results?

Connected Everything used these results to plan their Annual Conference (which was an online Festival in 2021) which included sessions on the topics identified as important to ECRs. Prof. Sarah Sharples (PI) gave a Career Insight talk, Zena Wood from DEAS gave an elevator pitch workshop and we had a working with industry session led by industry leaders.

Connected Everything worked with **efutures** network to create a summer skills building programme, culminating in a small grant opportunity, again using the feedback to devise the programme structure. This programme also included **efutures** funding a design-thinking workshop, facilitated by professionals, for ECRs, with a focus on working in a multidisciplinary team and **Connected Everything** delivering a by ECR for ECRs application writing workshop. Feedback from one applicant stated:

> *"All the CE programmes are very helpful for us to build this proposal.*
> *We formed the research team in the CE festival 2021. Then we identified the topics and discussed at several online meetings. Through attending the writing workshop as well as pitch training session, we had a chance to practice and strengthen our writing and communication skills. More importantly, we received practical strategies of collaborating with industry partners from the "Working with Industry" workshop. We successfully built the connection with industrial practitioners and will collaborate on this feasibility study as well as future opportunities."*
> *Applicant Sept 2021*

SPRITE+ used the feedback from this survey to inform the design of its ECR training and development programme. This programme includes weekly ECR online socials and the 'SPRITE+ Top Tips' series, which covers topics such as being an effective PI; applying for academic jobs; managing conflicting demands; and recruiting participants. The 2021 SPRITE+ ECR annual workshop will be hosted in collaboration with the PETRAS Centre on the topic of stakeholder engagement.

eFutures further used the survey findings to inform two multidisciplinary funding calls for ECRs, with a total value of £75,000. Our PI, Prof Roger Woods, also launched a workshop at Queen's University Belfast, specifically on writing funding applications to EPSRC, attended by 70 people. In the next twelve months, we hope to hold an in-person event with a focus on Early Career Researchers, and this survey will inform the form and content of that.

Other opportunities

We are keen to work across the Connected Everything led "Network of Networks" to spot opportunities to work together to support ECRs, for example:
1. PETRAS has a working with Industry series we should promote
2. ECRs want to network with other networks so could we hold a joint session in 2022 to facilitate this. SPRITE+ is leading on facilitating this.
3. We need to continue offering networking opportunities both online and in person as this is still a key ask. The Connected Everything conference used an innovative platform – gather.town which did support online networks and got a positive response from delegates.
4. The response from ECRs to the efutures funded Design Thinking workshop facilitated workshop was universally positive, and several delegates requested further training, or roll out to colleagues. This might be something which we can look to expand on in 2021-22.