



////Identifying Ways to Make the BEST Program Even Better

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Broadening Experiences in Scientific Training – or ‘BEST’ – is a program that aims to help biomedical students to explore and pursue expanded career options beyond traditional academic positions. While the program has been in place for a few years, the views of participating faculty members on the value of BEST’s career development initiatives had never been collected. To fill this gap, Dr Stephanie Watts at Michigan State University and her collaborators asked faculty members at seven institutions participating in the BEST program to answer surveys and share their perceptions. By shedding light on the program’s strengths and weaknesses, the team’s findings will help to improve BEST initiatives, greatly benefitting the participating students.

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In 2012, the National Institutes of Health, a leading medical research centre in the US, published a workforce report on biomedical trainees and their careers. This report, along with others released around that time, highlighted the need to better prepare biomedical students to enter the workplace and kick-off their careers.

This call for change was based on observations suggesting that despite the variety of available graduate and postdoctoral programs in biomedical sciences, most academic courses only prepared students for careers as academic researchers. Nonetheless, a growing number of students showed interest in career paths outside of academic settings, which were not always discussed in their courses.

The National Institutes of Health thus devised the BEST call for proposals, which aimed to foster change and better prepare students for a broader range of careers in biomedical sciences through support by the NIH Director’s Fund. Applicants were encouraged to develop innovative approaches and interventions that could increase students’ awareness about career options and help them feel more confident in approaching their desired workplace.

Grants to take part in the program were awarded to 17 different institutions, which were encouraged to collaborate with one another through the National Institutes of Health BEST Consortium. These institutions were asked to create and implement initiatives that could help students in pursuing diverse career options.

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An important component of all BEST initiatives, which plays a major part in ensuring their success, is the contribution of faculty staff. In fact, faculty members and mentors who deliver or lead the lessons, workshops, and other career development sessions, are the ones who can ensure that BEST initiatives achieve their objectives.

It is thus very important for faculty members to recognise the value of the BEST program, commit to its mission, and convey this to participating students. Additionally, they should help trainees to feel supported in the professional development activities at their university, so that they can make the most out of them in the future.



Aware of the vital role that faculty members play, Dr Stephanie Watts at Michigan State University and a team of researchers from other institutions with BEST programs decided to carry out a study investigating the perceptions of mentors who lead BEST professional development initiatives.

To achieve this, they created two independent surveys: the MSU survey and the Vanderbilt survey. Both surveys asked respondents to share their views about BEST professional development initiatives, with some questions focusing on all students and others specific to graduate or postdoctoral students.

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The MSU BEST survey was given to 592 faculty members at five institutions, while the Vanderbilt survey was handed out to 225 faculty members working at another two institutions also taking part in the BEST program. The data and opinions collected by Dr Watts and her colleagues offer great insight into how faculty members perceive BEST initiatives and whether they feel that they are valuable.

Overall, survey respondents thought that introducing a broad range of career activities was vital, particularly due to the shortage in available academic positions. Many faculty members also share the belief that the career development needs of graduate students are different from those of postdoctoral fellows.

While most respondents reported that they actively mentored trainees in their career development, some felt that they did not have the knowledge or training necessary to do so effectively. In addition, some mentors felt that the students participating in the activities lacked the knowledge and skills that are most sought-after by non-academic employers. This suggests that there is an urgent need to provide students with activities that will ultimately allow them cultivate the skills and knowledge they require.

A further trend in the responses collected by Dr Watts and her colleagues was the feeling that institutional support was of key importance for helping students in furthering their careers. Interestingly, while the vast majority of respondents believed that BEST training sessions are valuable and beneficial for students, not all of them were aware of some particular aspects of the program, including local programs and the national BEST consortium.

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Although the BEST program has now been around for over half a decade, the recent study carried out by Dr Watts and her colleagues is the first to gather the opinions and perceptions of academic staff who are directly involved in its career development activities.

Dr Watts and her colleagues hope that the data collected in their surveys will help to improve the program, shedding light on what faculty members feel are its strengths and weaknesses. As faculty members are those who are ultimately most involved in delivering the program, their views could be particularly useful in evaluating and improving BEST initiatives.

In the future, for instance, faculty members could be made more aware of the program's structure, including the existence and role of the BEST Consortium (available to all), BEST programs and their own PhD Career Service offices. In addition, as some mentors delivering the program reported that



they were not confident in their ability to effectively help students in their career development, training could be provided to enhance their skills in supporting students.

Dr Watts and her colleagues also plan to carry out further studies assessing the perceptions of both staff members and students involved in the BEST program, in an effort to identify specific activities that are particularly beneficial and effective in preparing students for their future careers.

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This SciPod is a summary of the paper 'Faculty perceptions and knowledge of career development of trainees in biomedical science: what do we (think we) know?', published by PLoS ONE, <https://doi.org/10.1371/journal.pone.0210189>.