

**ADVANCE Program at the University of Michigan  
Elizabeth Caroline Crosby Research Award  
Evaluation Report  
May, 2019**

## **INTRODUCTION**

The Elizabeth C. Crosby Research Awards are available to meet the career-relevant needs of individual instructional, research, and clinical track faculty in science and engineering, if meeting those needs will help increase the retention or advancement of women scientists and engineers. The fund, initially seeded by an NSF ADVANCE grant, and now funded by the University of Michigan, supports a range of activities necessary for scholarly work in science and engineering fields.

This report presents data on Crosby fund allocation and usage from 2002 (the program's first year) through 2016. Within this time period, the UM ADVANCE Program has administered 17 rounds of Elizabeth C. Crosby award competitions. The competition has been administered annually since 2002. Further, in two years (2004 and 2005) there were two rounds of awards. Over this period, the Crosby Research Award fund has received 487 proposals. Of these proposals, 19% have been submitted by faculty members from the College of Engineering (CoE), 23% from the College of Literature, Science, and the Arts (LSA), 40% from the Medical School, and 18% from other schools<sup>1</sup>. The program has funded 168 proposals<sup>2</sup> involving 156 unique faculty members<sup>3</sup> in the science and engineering fields, for a total of over 2.1 million dollars. Of these funded proposals, 20% were awarded to CoE faculty, 30% were awarded to LSA faculty, 32% were awarded to Medical School faculty, 8% were awarded to the School of Public Health, and the remaining 9% were awarded to faculty in other schools.

## **EVALUATION**

The program is evaluated annually by the ADVANCE Program through a survey that asks recipients to report how the funding supported them. The purpose of this evaluation is to determine the value of the Crosby Research Award to recipients and to assist the ADVANCE Program in assessing the future of the Crosby Research Award program. The online survey contains a series of open-ended questions, including:

- What did the funding allow you to do?
- How easily could this work have been accomplished without the Crosby funding?
- How, if at all, has the funding been useful in supporting the careers of women scientists and engineers?
- Did you use the Crosby award to cover any family care related expenses?
- Do you have any other comments about the Crosby award?

This report provides a summary of recipient survey responses by question. Responses were categorized by theme in order to make analysis and reporting possible. Please note that a single response could be categorized as related to multiple themes, if the response was relatively long and/or multi-faceted. To date the response rate to the surveys over the life of the program has been 73%.

### **How Crosby Funds Were Used**

Survey participants were first asked: *“What did the funding allow you to do? Provide a brief description of the research project and activities/expenses that were supported.”* Crosby award recipients most commonly reported that the funding supported research activities and costs, such as purchasing equipment and supplies and getting new projects off the ground (45%) and/or funded student research involvement (35%; see Figure 1). A substantial number (28%) indicated that Crosby funds were used for

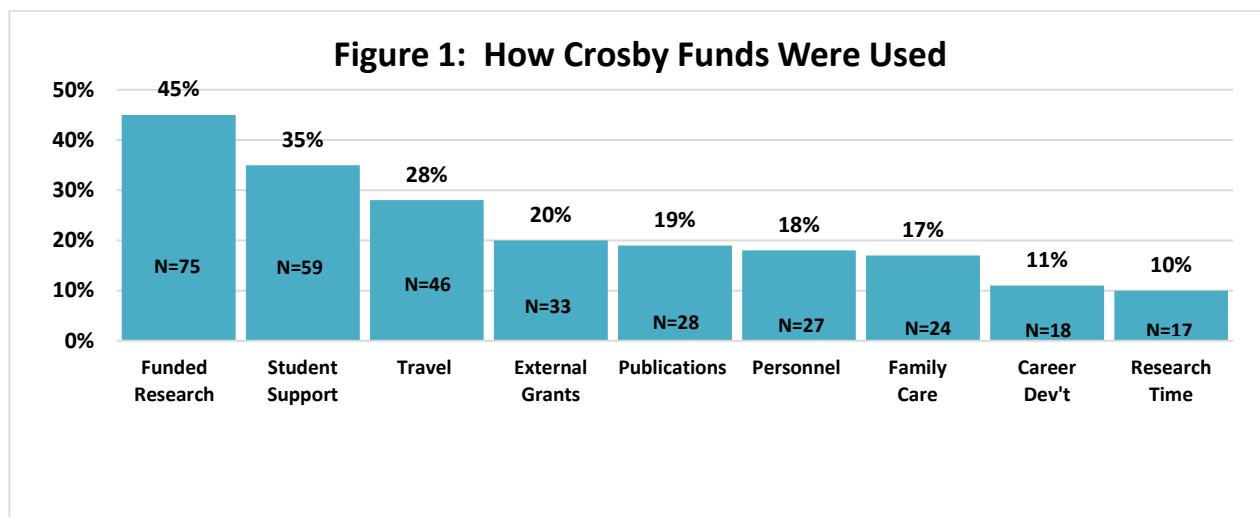
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<sup>1</sup> These percentages sum to 99% due to rounding.

<sup>2</sup> A very small number of these were fully funded via Rackham after the applicants initially applied for Crosby funds. These awardees were still included in our evaluations of the Crosby Award program because the funds were used to support their Crosby proposals.

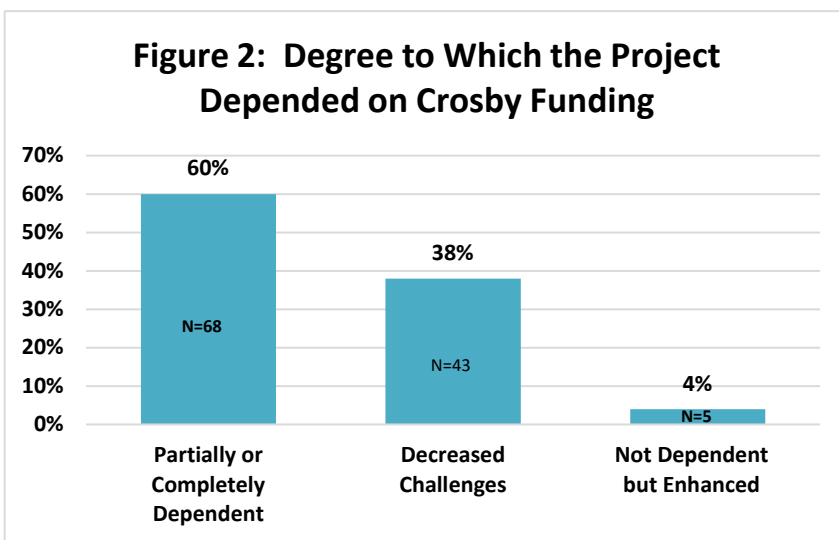
<sup>3</sup> Nine faculty members received two rounds of funding between the 2002 and 2015 award years. For each award received, a faculty member was surveyed about the use and impact of the funds.

travelling to collaborate with non-UM researchers, collect data, and/or attend conferences and meetings. Others indicated that they used the funds to help them obtain grants, by producing preliminary data or hiring a grant editor (20%); to aid in the publication of papers, journal articles, books, or manuscripts (19%); to fund lab personnel such as a research technician (18%); and/or to defray family-care costs such as traveling with their children to attend a conference or childcare while they conduct research (17%). Recipients also reported that they used the funds to conduct leadership activities and aid in professional development (e.g., leadership retreats and workshops, academic groups, chairing or presenting at conferences; 11%) and/or to provide more time for research (by buying out teaching time or providing summer salary support; 10%).



### Necessity of Crosby Funds

Respondents were next asked: “How easily could this work have been accomplished without the Crosby funding?” Sixty percent of the respondents indicated that some of all of the work supported by the Crosby Research Award could not have been accomplished without this funding (see Figure 2). Over one-third of the remaining respondents (38%) commented that they would have experienced challenges and difficulties with their work, such as significant delays, without the Crosby funding. In addition, four percent reported that their research was sufficiently funded and that the award was used to support a special project or minimize overall research costs. In one case, a respondent indicated they wouldn’t have been able to travel or have their family with them while traveling without the funds.

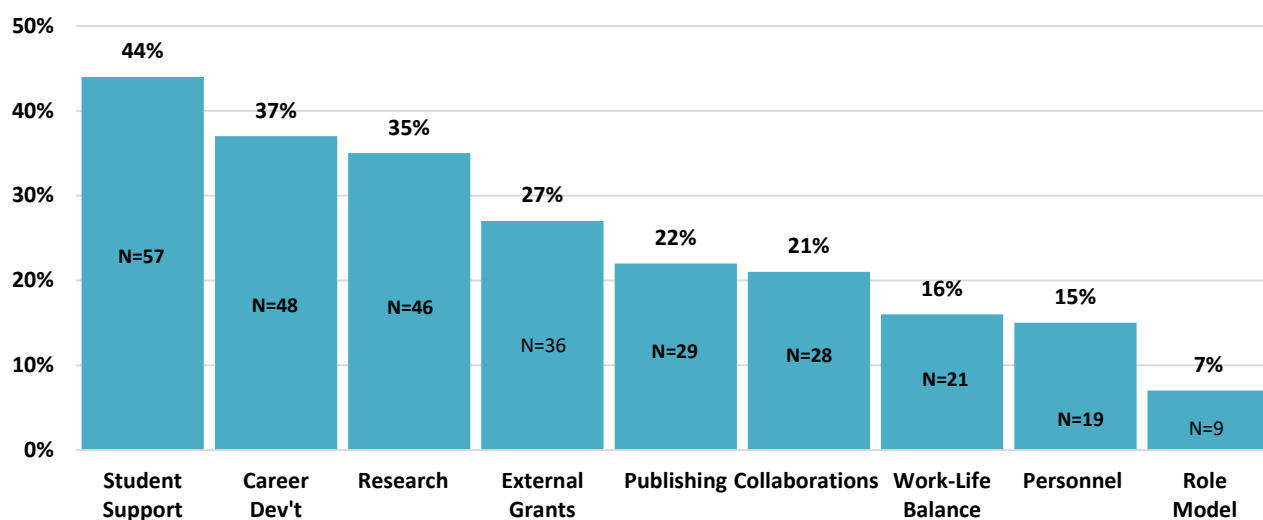


### Career Support for Women Scientists and Engineers

Next, respondents were asked how the funding was useful in supporting the careers of women scientists and engineers (e.g., colleagues, post docs, graduate students), including their own, if applicable. Nearly half of the respondents (44%) indicated that the Crosby award enabled them to offer research experiences, training, and/or mentorship to women students & postdocs (see Figure 3). Over one-third (in each case) reported that the funds aided in the academic and professional development of women

(e.g., enhancing their professional reputations, promotions, letters of recommendation, and improved CVs; 37%) and supported their scholarly work by providing them time and resources to focus on their research efforts (35%). One quarter reported that the funds supported external grant applications, with many commenting that it helped them produce preliminary data (27%). Slightly fewer indicated that the funds enabled them to produce a manuscript, publication, or patent (22%); and/or allowed them to initiate connections with other researchers and develop collaborations with other labs (21%). Sixteen percent of the respondents reported that the funds helped them achieve work-life balance by providing childcare, allowing them to take time off for maternity leave, allowing them to be an active parent while building a career, and relieving stress which allowed them to focus on their research. Fifteen percent indicated that the award allowed them to hire personnel who helped them with their research. A small number also noted that the award led them to be a more active role model for women in their field and to more actively promote gender equity (e.g., through workshops; 7%).

**Figure 3: How Crosby Funding Supported the Careers of Women**



### Funding of Family Care

Award recipients were also asked: “Did you use the Crosby award to cover any family care related expenses?” Twenty-seven percent of respondents reported that they had used the Crosby Research Award to cover these types of expenses.

In addition, recipients who were selected for the award between 2002 and 2010 were asked if the availability of family care related expenses were a consideration in their decision to apply to the Crosby Research Award; 20% indicated that this was the case.

### Additional Comments

Finally, recipients were given the opportunity to provide additional comments in open-ended format. Many recipients used this opportunity primarily to convey their appreciation for the Elizabeth C. Crosby Research Award and to emphasize the critical role the award plays in supporting women science and engineering faculty and students at the University of Michigan and elsewhere. Additionally several faculty members noted the unique value of the support for family care that the award offers. Some highlights from these comments include:

- “This is one of the best things about being at Michigan. I proudly talk about this award (more proudly than any other) because of the wonderful things it allows women at Michigan to accomplish.”

- “I really think the Crosby award is exceptional. Besides the financial support, the recognition that women scientists have unique challenges gives a feeling of community for all women, whatever the challenge. Particularly in the current climate, the camaraderie that comes from this recognition is comforting.”
- “This was an important source of funding for me, and I feel my experience at Michigan would not have been as successful without this funding.”
- “I think this is a fantastic program and we are really lucky to have it. As a new mother, and hearing lots of stories from other academic mothers from various institutions, the fact that we have this fund that can support women in various aspects of their careers including support for family care related expenses is a huge relief for me as I think about balancing family and career going forward. There are so many people who do not have this support, and it does impact whether we can do field work or attend conferences. This is my first time receiving it and it helped me navigate maternity leave for my first child. I hope it will be available in the future!”
- “This is an incredibly important and unique program that merits ongoing support. I am very grateful. It was instrumental in allowing research that contributes substantially to our understanding of issues confronting many women in academia. Thank you!”
- “This is a great program, providing wonderful supports to woman faculty to achieve a much better balance between research, work, and family lives. I really appreciate the understanding, acknowledgement and supports from Crosby funding for helping release women's big constraints from their family roles despite their great career ambition!”