

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)
SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP (SURF)
Alumni Questionnaire for Quantitative Survey

FOUR STANDARD SURVEY QUESTIONS

1. Explain who will be surveyed and why the group is appropriate to survey.

The National Institute of Standards and Technology (NIST) proposes to conduct an online survey through the company Camper Consulting, who has been contracted to carry out a two-year comprehensive assessment of the Summer Undergraduate Research Fellowship (SURF) program. A survey will be sent to SURF Alumni who completed the program between 2003 and 2014 to understand their experiences with SURF, its influence in choosing a field of study or work, and whether they have continued in a Science, Technology, Engineering & Mathematics (STEM) field of study or work.

The overarching purpose of the program evaluation is to assess the impact and effectiveness of SURF by measuring the following outcomes:

- Student clarity about the discipline(s) they would like to pursue, STEM-related or not
- Students proceeding to pursue one or more STEM-related graduate degrees
- Students proceeding to STEM-related careers or employment
- Students proceeding to careers with NIST

2. Explain how the survey was developed including consultation with interested parties, pre-testing, and responses to suggestions for improvement.

The discussion guide to be used as the protocol in qualitative interviews with SURF Alumni was developed by Camper Consulting in consultation with NIST-International & Academic Affairs Office (IAAO) and the NIST SURF coordinator. In addition, interviews with SURF Directors, SURF Advisers, and SURF Alumni informed the development of the discussion protocol.

3. Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.

The survey will be e-mailed to Alumni for whom there is contact information on file. The e-mail (Edge_Research@edgesurveys.com, replies@edgesurveys.com, or replies@edgeresearchsurveys.com) will contain verbiage about the purpose of the survey, NIST as sponsor, anonymity of responses, and will include a hyperlink (<http://dimensions.edgeresearch.com/e.asp?p=XXXX&S=C&id=xx>) directly to the survey which will be hosted online. We estimate the average length of the time needed to complete the survey

is 15 minutes. We expect 10% response rate among 1,600 Alumni with e-mail contact information available.

To increase and encourage participation in the survey, reminder e-mails (Edge_Research@edgesurveys.com) will be sent up to three times after the initial e-mail. Entry into a sweepstakes for one of fifteen \$20 Amazon gift cards will be offered for completing the survey to optimize completion rates.

4. Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.

Survey data will be analyzed in the aggregate and by key sub-groups where applicable (such as Alumni year, male/female, NIST campus, etc) to understand Alumni experiences with SURF, its influence in choosing a field of study or work, and the approximate proportion of Alumni continue in a Science, Technology, Engineering & Mathematics (STEM) field of study or work. Differences between key sub-groups will be measured at the 90% and 95% confidence interval.