

OMB Control No. # 0693-0033 – NIST Generic Clearance for Program Evaluation Data Collections

NIST Economic Study of NIST-NRC Post-Doctoral Program

FOUR STANDARD SURVEY QUESTIONS

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

The purpose of this information collection is to acquire information from former National Institute of Standards and Technology-National Research Council (NIST-NRC) postdoctoral researchers that will allow the National Institute of Standards and Technology (NIST) to evaluate the efficacy and economic outcomes attributable to residency within the program.

The collection will acquire information from individuals regarding patents acquired since their residency within the NIST-NRC postdoctoral program that resulted from or were influenced by the work performed whilst within the program, as well as any information regarding licenses of such patents and any revenue therefore generated. Additionally, the collection will acquire information on any business endeavors pursued by former postdoctoral researchers in the role of founder or participant in founding.

Collecting information will allow NIST to empirically analyze the wide-reaching economic benefits that are generated by residency in the NIST-NRC postdoctoral program. Thus, we expect that interviewees will be interested and see the benefits that were generated outside of their primary fields of work and research through their participation in this program.

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

The instrument is very simple in nature, consisting of a total of 12 total questions contained within two subcategories. The questions were developed based on the information required to perform a full assessment that is not already available through the existing data concerning former NIST-NRC postdocs, or through publicly available data.

In order to ensure proper language and precision of questions, guidance was sought and received from Drs. Michael Walsh and Donald Archer, both of NIST's Technology Partnerships Office. Dr. Walsh's suggestions focused on increasing the precision of questions, therefore lessening the potential burden hours required by participants in the survey. Dr. Archer's comments pertained to the phrasing within the questions themselves in order to ensure the legal efficacy of the questions.

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 disbursed to all individuals who participated in the NIST-NRC postdoctoral research program from 1981 through 2014, for whom we have recorded email contact information. If an individual does not have a recorded email address within the NIST-NRC postdoc database, but they do possess a verified linkedin profile¹ this contact information will be used in place of formal email. Individuals with either of these two forms of contact information compose the full sample for the study.

We will invite the former postdocs to participate in the survey. Invitees will be invited by email or by linkedin. The invitation will include a brief synopsis of the study as well as the survey itself. Due to the novel nature of the study as well as the low level of effort required in responding (at the participant's convenience), balanced with the potentially outdated/unmonitored contact information of some of the participants, we expect a 30% response rate. We will issue one request to participate and one reminder.

Participating individuals will receive copies of the analysis when they are approved for public release by the NIST Technology Partnerships Office. These reports will provide an analysis of the economic impacts that participation in the program by these individuals has yielded to the economy as a whole.

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

For the purposes of this retrospective evaluation, NIST does not require statistically significant results. Rather, it requires an overall evaluation of outcomes, and impacts.

The information collected will be analyzed using Stata, and Excel software tools. These tools permit efficient thematic analysis that will allow NIST to perform the basic econometric analysis required to gain a fuller understanding of some of the readily unobserved benefits of the NIST-NRC postdoctoral program both to the scientific as well as the general community.

¹ Hereby meaning: A linkedin profile for which the name of the individual as well as the Ph.D granting institution matches that recorded in the NIST-NRC postdoctoral database, and the profile identifies the individual as a former participant within the NIST-NRC postdoctoral program.