

Response Form for the Final Performance Summary Report*

1. Name of Grantee: Albert Einstein Healthcare Network

2. Year of Grant: 2009 Formula Grant

A. For the overall grant, briefly describe your grant oversight process. How will you ensure that future health research grants and projects are completed and required reports (Annual Reports, Final Progress Reports, Audit Reports, etc.) are submitted to the Department in accordance with Grant Agreements? If any of the research projects contained in the grant received an “unfavorable” rating, please describe how you will ensure the Principal Investigator is more closely monitored (or not funded) when conducting future formula funded health research.

Oversight for the health research grants at our site is provided by the Research Subcommittee of the Medical Staff Board and the Office of Research and Technology Development (ORTD). Only experienced investigators with a track record of successful research project completion are eligible for these awards. The ORTD staff ensures that the appropriate approvals are in place before the study is initiated and oversee the set-up of the research accounts and distribution of the funds. The ORTD staff also follows up with the investigators on each project to ensure that the projects are moving along according to schedule and all required reports are submitted in a timely manner to the PA Department of Health in accordance with the Grant Agreements.

* Please note that grantees' Final Performance Summary Reports, Response Forms, and Final Progress Reports *will be made publicly available on the CURE Program's Web site.*

Project Number: 0988601
Project Title: A Feasibility Study of Fruit and Vegetable
Consumption in Low Income Communities
Investigator: Phipps, Etienne

B. To ensure that feedback provided in the Final Performance Summary Report is utilized to improve ongoing and future research efforts, briefly describe your plans to address each specific weakness and recommendation as noted in Section B of the Final Performance Summary Report and listed below. If no weaknesses are listed below, no response is required.

(As you prepare your response please be aware that the Final Performance Summary Report, this Response Form, and the Final Progress Report will be made publicly available on the CURE Program's Web site.)

SPECIFIC WEAKNESSES AND RECOMMENDATIONS

Reviewer 1:

None.

Reviewer 2:

Designing future studies to overcome some of the limitations identified in the present manuscripts is recommended.

Response: Yes, we agree with the importance of limiting the limitations in research addressing healthy eating. Improving the methods to collect objective purchase data, expanding collection of participants shopping practices are two areas of interest to us. Linking purchase and consumption is an important methodological challenge as well for improving future studies.

Reviewer 3:

1. Since the investigators did not examine changes in the purchase of less healthful foods in response to the intervention, this should be explored further, because, if fruit and vegetable purchase/consumption increases without resulting in decreases in purchase/consumption of other less healthful foods, obesity will not be affected.

Response: We appreciate the reviewer's comment and completely agree that more of the total food purchases need to be included in order to understand the impact of any intervention targeting increases in healthier purchases. We hope to continue to refine our analytic approaches to include this relationship.

2. Because an increase in fruit purchases does not necessarily translate into greater fruit consumption, investigators should study the correlation between fruit purchases and fruit consumption in their sample.

Response: We agree that this is of major importance. While it is known that the majority of food purchased is consumed in the home, we do not know who ate what. We were very interested in understanding this relationship. We proposed to do just that in a subsequent proposal to Robert Wood Johnson Foundation which, unfortunately was not funded.

C. If the research project received an “unfavorable” rating, please indicate the steps that you intend to take to address the criteria that the project failed to meet and to modify research project oversight so that future projects will not receive “unfavorable” ratings.

Response: N/A

D. Additional comments in response to the Final Performance Review Report (OPTIONAL):

Response: We thank the reviewers for their support of our research.

Project Number: 0988602

Project Title: The Role of Left Inferior Frontal Cortex in Sequencing and Language

Investigator: Schwartz, Myrna

B. To ensure that feedback provided in the Final Performance Summary Report is utilized to improve ongoing and future research efforts, briefly describe your plans to address each specific weakness and recommendation as noted in Section B of the Final Performance Summary Report and listed below. If no weaknesses are listed below, no response is required.

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SPECIFIC WEAKNESSES AND RECOMMENDATIONS

Reviewer 1:

Although it could be suggested that loosening recruitment criteria might improve recruitment (because that's the method that might be taken in a psychiatric research protocol), that approach might be fraught with additional unknown hazards, like a consequential loss in the specificity of the patient populations and the resulting lack of interpretability in the data. It does seem unusual and a weakness that more information was not provided about why limitations existed in the registry population. Were there too many patients with big lesions, aphasia that was too severe (seems likely based on the loss of two non-LIFC patients' data), or other reasons? Another weakness was that there was no information provided as to whether community or hospital-based recruitment strategies were considered, and if so, why they were not pursued.

Response: The registry aims to capture a wide diversity of patients, for which it does employ community and hospital-based recruitment strategies. Such diversity is essential to those of us who conduct large case-series research to investigate the demographic, behavioral, and lesion correlates of specific cognitive and linguistic symptoms. The downside, as the reviewer notes, is that for any particular constellation of deficits (and strengths), it can be hard to reach recruitment goals. In this study, the difficulty was compounded by some features of the design that posed problems for patients with more severe aphasia. We have since modified the design to make it appropriate to a wider range of patients and will begin collecting pilot data on the modified procedure shortly.

Reviewer 2:

The specific weakness in retrospect, which the investigators did not expect in advance based on their pilot study, was that despite the large number of potential subjects screened based on having the correct locations of the anatomical stroke, only seven were able to finally participate. The method to resolve this is collaborative studies across multiple institutions to accrue sufficient subjects with both the correct locations of the anatomical stroke and the ability to finally participate in the paradigms.

Response: This lab is involved in a number of such multi-site projects and is prepared to invoke this mechanism if our current strategy (Response to Rev. 1) proves inadequate.

Reviewer 3:

This study was done well and finished with a publication that disseminates the gained knowledge to the wider clinical and scientific community.

Response: We thank this and the other reviewers for their encouragement.

C. If the research project received an “unfavorable” rating, please indicate the steps that you intend to take to address the criteria that the project failed to meet and to modify research project oversight so that future projects will not receive “unfavorable” ratings.

Response: N/A

D. Additional comments in response to the Final Performance Review Report (OPTIONAL):

Response: None.

Project Number: 0988603
Project Title: Longitudinal Multi-modal Neuroimaging of
Natural Recovery after Traumatic Brain Injury: A Pilot Study
Investigator: Kim, Junghoon

B. To ensure that feedback provided in the Final Performance Summary Report is utilized to improve ongoing and future research efforts, briefly describe your plans to address each specific weakness and recommendation as noted in Section B of the Final Performance Summary Report and listed below. If no weaknesses are listed below, no response is required.

(As you prepare your response please be aware that the Final Performance Summary Report, this Response Form, and the Final Progress Report will be made publicly available on the CURE Program's Web site.)

SPECIFIC WEAKNESSES AND RECOMMENDATIONS

Reviewer 1:

1. At the design stage of the study it is important to anticipate many possible scenarios and plan accordingly how to handle them. Although the impact of conducting the study in four years rather than the planned two years didn't impact the outcome, it is a lesson every investigator needs to think about, i.e., the potential obstacle that goes with recruiting a patient population and fulfilling all institutional regulatory requirements.

Response: We agree with the reviewer about the importance of piloting the logistical aspects of a project in order to get realistic estimates of eligibility, consent rate, and reliability of longitudinal follow up. Based on our experience with this pilot, we have revised a number of procedures for the R01 NIH grant that we received later, including adding another site (Bryn Mawr Rehab) to boost enrollment. In addition, to facilitate timely administrative processes, we are exerting our best efforts to submit our regulatory applications early and then follow them up frequently.

2. It is puzzling that no attempt was made to summarize the data collected longitudinally (except for the sample size estimation). The main expected outcome from this study was the development of a utility index for recovery, but, citing threshold specific problems, the data was not presented or summarized in any form and as a result nothing was learned about the expected research outcome and benefits.

Response: We achieved two out of three originally proposed aims (Aim 1 and 3). For Aim 3, we presented the results from longitudinal analysis. As the reviewer pointed out, however, we did not present any results for Aim 2 because the nature of the data (i.e., the randomness of the structural/functional mask maps after thresholding) and the small sample size made it difficult to present a meaningful summary measure. We also believe that pointing out that thresholding is a tricky issue in developing a structure-function

discrepancy map is a valuable contribution that will bring other researchers' attention to this issue.

Reviewer 2:

None.

Reviewer 3:

1. The investigators made an issue regarding normalization. Normalization of brains is avoided, which is important given the fact that brains have lesions and atrophy; although, one wonders how critical this problem really is in the milder cases and how important prediction is in the more severe ones.

Response: If spatial normalization is avoided, the brain needs to be segmented to yield summary measures, which is another challenge in medical imaging of damaged brains. Even in the mild form of TBI, the issue of spatial normalization is significant because the effect size of interest in this population is often small, making more precise quantification of brain changes desirable. However, we disagree with the reviewer's implication that outcome prediction is less important in severe injury. Indeed, among patients who remain unconscious for several weeks post-injury, the range of recovery at 1 year runs from continued unconsciousness to return to work, suggesting that there is much to be explained in this variability.

2. The investigators were able to show the relationship of volume reduction to functional disability but it sounds as if it's in the wrong direction (volume reduction correlating with functional improvement.) This needs to be addressed both in terms of confirmation and mechanistically.

Response: The direction is confirmed to be correct (i.e., more improvement in DRS associated with more volume reduction). We are not sure about the underlying mechanisms of this phenomenon. Greater volume reduction may mean higher severity and more severely impaired patients might have shown more improvement in DRS. A study with a larger sample will help to resolve this issue.

3. Data from some of the imaging modalities touted in the strategic plan are not clearly presented (such as functional perfusion imaging). Although the sample size is limited, it would be useful to present data on which imaging modalities were useful and will be applied in the future.

Response: Two purposes of using perfusion data were 1) developing structure-function discrepancy index and 2) estimating the sample size for a larger follow-up study. We successfully used perfusion data to achieve the latter aim. For the former aim, please see our response to reviewer 1's second comment. In general, with this small sample size, anatomical data seemed to be more useful (in terms of association with behavioral

measures) probably due to higher SNR. We need to conduct a larger study to see whether perfusion measures can better predict behavior.

C. If the research project received an “unfavorable” rating, please indicate the steps that you intend to take to address the criteria that the project failed to meet and to modify research project oversight so that future projects will not receive “unfavorable” ratings.

Response: N/A

D. Additional comments in response to the Final Performance Review Report (OPTIONAL):

Response: None.