

<b>APPLICATION FOR ACADEMY OF DISTINGUISHED EDUCATORS</b>  <b>FULBRIGHT &amp; JAWORSKI L.L.P. EDUCATIONAL GRANT</b>	LEAVE BLANK-FOR ADMINISTRATIVE USE ONLY	
	Date received:	Date Reviewed:
TITLE OF PROJECT: Evaluating the Impact of the Advanced Fellowship Program in Health Services Research		
NAME OF APPLICANT: Sylvia J. Hysong	DEGREE(S): Ph.D.	
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PROJECT ABSTRACT (maximum of 300 words):  <p><b>Objective:</b> Evaluate the success and impact of the Health Services Research (HSR) Section’s Advanced Fellowship Program in HSR by comparing its alumni’s career progressions to national benchmarks.</p> <p><b>Proposed Plan of Work:</b>  <i>Participants:</i> up to 46 MD and PhD alumni from HSR section’s Advanced Fellowship Program in HSR (AFPHSR)  <i>Measures:</i> We will collect career trajectory information from alumni CVs (e.g., initial job post-fellowship, career development awards, grants, and publications); we will also collect fellowship experience and satisfaction information via a web-based survey.  <i>Procedure:</i> We will compile an up-to-date list of alumni contact information via a combination of program archival records and profile searches on professional social media platforms, bibliographic databases, and institution websites. Alumni will complete a brief web-based survey and provide an up-to-date CV, from which we will abstract career trajectory information.  <i>Data Analysis:</i> Descriptive statistics will portray the program’s diversity and reach. We will also create flow diagrams for alumni currently in research and/or academic positions, to identify modal career trajectories. Finally, regression and hierarchical linear modeling will identify significant predictors of reaching key career milestones. We will compare results from our local fellowship program to benchmark data from a currently ongoing national evaluation of the AFPHSR.</p> <p><b>Significance:</b> This project will provide important information for future planning and growth of our fellowship program, as well as pilot data for a competitive grant proposal to serve as the national coordinating center for the AFPHSR.</p> <p><b>Timeline:</b> We expect the proposed work to be complete within one year of funding.</p> <p><b>Feasibility:</b> The national evaluation is being conducted by the Education Core in the BCM’s HSR section; measures, access to national data, and analytic personnel are already in place. This project will provide data collection support for our local fellowship program in order to meet scheduled timelines and acquire richer data.</p> <p><i>“The signature below testifies that upon receipt of the grant, I will submit an annual one-page progress report and a one-page final report upon conclusion of all activities to the Academy Educational Grant Review Committee”</i></p>		
SIGNATURE OF APPLICANT:		DATE: 05-15-2015

Narrative Section (limit to 3 pages)	<b>A) Goals/ Objectives and Specific Aims</b> <b>B) Proposed plan of work</b> <b>C) Significance:</b> role of the proposed activity in a) enhancement of applicant’s development as an educator, b) to the department and or the College <b>D) Applicant’s background, skills, previous work pertinent to the project</b> <b>E) Clear methods of assessment of work proposed (if applicable)</b> <b>F) Timeline</b> <b>G) Feasibility / Demonstration of time and ability to complete the activity)</b>
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### 1) Goals/ Objectives and Specific Aims

The engine of innovation for BCM Department of Medicine’s Health Services Research (HSR) Section is recruitment of talented individuals from an array of basic social and behavioral, clinical, and translational science fields and their integration into interdisciplinary research teams. Ongoing success for our section depends on how well recruits translate the content and principles of HSR into actionable skills and how they integrate their particular expertise into functioning interdisciplinary teams addressing critical innovation challenges. However, baseline data does not currently exist with which to estimate impact of our current HSR training programs or the return on investment reaped by BCM. An evaluation of our existing post-doctoral fellowship program in HSR will provide insight on the career trajectories of our alumni, and a more in-depth understanding of fellow and program resource needs to sustain and grow our program in years to come. Conclusions drawn from this evaluation can guide consensus building for core training competencies and targeted experiences to address training needs and gaps (e.g., partnership research, implementation science, or comparative-effectiveness research), and provide important pilot information for growing the HSR Section’s Education Core to increased national-level recognition via competitive applications for national-level training grants. To accomplish this vision, we propose the following specific aim:

**Specific Aim:** Evaluate the success and impact of the HSR Section’s Advanced Fellowship Program in HSR by comparing its alumni’s career progressions to national benchmarks.

### B) Proposed Plan of Work

Our approach to evaluating the HSR fellowship training program will be guided by Kirkpatrick’s Four Level model of training evaluation<sup>1</sup>, the gold standard in training evaluation for nearly four decades. Each subsequent training criterion is increasingly difficult to evaluate without contamination from other constructs; this proposal will concentrate on *reactions* (from the Kirkpatrick levels) criteria to gauge satisfaction, and on basic *results* (from the Kirkpatrick levels) criteria to gain a broad, albeit imperfect, measure of impact. Table 1 presents an overview of the proposed evaluation activities and their relationship to Kirkpatrick’s model.

TABLE 1. OVERVIEW OF EVALUATION ACTIVITIES

Kirkpatrick Criterion	Construct Assessed	Evaluation Tool
<i>Reactions</i>	Fellow Satisfaction	<ul style="list-style-type: none"> <li>• Current and Alumni Fellow Satisfaction Survey</li> </ul>
<i>Learning</i>	Program Effectiveness	<ul style="list-style-type: none"> <li>• Beyond scope of current evaluation</li> </ul>
<i>Behavior</i>		<ul style="list-style-type: none"> <li>• Alumni Survey</li> </ul>
<i>Results</i>	Program Impact	<ul style="list-style-type: none"> <li>• Career trajectories and Placement Statistics</li> <li>• Dissemination of scholarly activities (archival data)</li> </ul>

#### **Sample**

We will aim to recruit all current and former fellows from our HSR fellowship, starting with fellows entering the program in 2000 and later. Our goal is to recruit as many of these two trainee populations as possible for our evaluation; this includes 46 MD and PhD alumni.

#### **Recruitment Strategy and Procedure**

We will rely on records of past and current fellows kept by the HSR fellowship program administration as well as from the VA Office of Academic Affiliations (our fellowship’s funding agency) to generate as complete a list of fellows and alumni as possible. Previous research on recruitment of clinicians and employees suggests obtaining current and accurate contact information is one of the biggest barriers to recruitment.<sup>3</sup> To obtain the most accurate contact information, we will supplement the lists generated from program and administrative records by performing profile searches as needed on professional social media platforms (e.g., LinkedIn, ResearchGate, etc.), bibliographic databases (e.g., Web of Science) and institution websites to obtain a comprehensive contact list.

Once we have an accurate list we will contact potential participants via e-mail; we will request a current CV, which will be used to capture their productivity and career data, and invite them to participate in a brief web-based survey to capture their satisfaction with the fellowship program.

#### **Data Sources**

- *CV/Resumes* -- From each fellow's CV/resume, we will extract academic demographic data (e.g., type and date of doctoral degree, institution where highest degree was earned, fellowship dates), career-history data (e.g., current and previous positions, dates, and industries), productivity data (for example, number of publications, number of grants, awards, etc.) A request for an alum's current CV is the most reliable source of career productivity and trajectory data. Archival sources such as social media profiles and university web pages, while useful for obtaining contact or supplemental information, are not reliable sources of career trajectory information, as online profiles are often out of date or missing entirely (Finney and Cronkite, personal communication, July 14, 2014).
- *Web-Based Survey* – Program satisfaction cannot be assessed validly through archival data sources. Consequently, we will create and deploy a brief web-based survey to assess fellows' satisfaction with their fellowship experience, suggestions for improving the fellowship program they attended as well as the overall VA/OAA HSR fellowship.

#### **Analysis and Measures of Impact**

- *Descriptive Statistics of Fellowship Programs* – We will calculate descriptive statistics to gain a sense of diversity and reach of the fellowship program, including the distribution of fellows by area of academic discipline; employment in research/academia vs. industry, by specialty; geographic dispersion (e.g., What institutions/geographic areas do fellows come from? Which fellowship program sites have the most national reach?).
- *Career Trajectories of Fellowship Alumni* -- For alumni currently in research and/or academic positions, we will create flow diagrams indicating the extent to which our fellows progress along significant career milestones, including the following:
  - Type of position into which fellow is placed immediately upon completing fellowship
  - whether they are awarded a career development award (CDA) and of what type;
  - time to CDA award from end of fellowship;
  - average number of years to tenure, first R01 or IIR, if available;
  - percent who stay at the VA, and
  - average number of years between promotions.

We will pay particular attention to the presence of critical points impacting career trajectory (i.e., Are there critical milestones where a significant portion of fellowship alumni are lost or change careers?).

- *Predictors of Career Milestones* – we will employ regression analysis and hierarchical linear modeling to test a series of models predicting the aforementioned career milestones from the following predictors:
  - Fellowship Program
  - Discipline of origin (e.g., internal medicine, health economics, clinical psychology)
  - Presence of a structured curriculum
  - Presence of specific program features (to be determined from survey data)
  - Covariates will include gender and year since program completion

#### **C) Significance**

The proposed activity will yield significant enhancements both to Dr. Hysong's development as an educator, as well as to the Department of Medicine's Health Services Research section. VA's Office of Academic Affiliations, the funding agency for our fellowship program, plans to announce a grant competition for a coordinating center that would provide coordinative services and oversight of all 23 HSR fellowship programs across the country. Our health services research section is well-positioned to submit a competitive application for this national educational opportunity; the activities supported by the proposed education grant would provide valuable pilot data for establishing the success of our local fellowship program and for submitting a fundable grant application. If funded, the coordinating center would be led by Dr. Hysong; this would be a material milestone in her development as a national educational leader, and a prestigious accomplishment for the College.

**D) Applicant’s Background, Skills, Previous Work Pertinent to the Project**

**Sylvia J. Hysong, PhD, Project Director**, is an industrial/organizational psychologist and associate professor of medicine with tenure in the health services research section, where she also serves as PhD Fellowships director. Dr. Hysong is a nationally recognized expert in audit and feedback and implementation science and winner of a 2012 Fulbright and Jaworski Faculty Excellence Award in Educational Research. She is also an incoming co-director of the VA Quality Scholars Coordinating Center, a nationally recognized fellowship in quality and safety for clinicians. She has considerable experience with evaluation and survey methodology, particularly with VA populations; she has been PI/Co-PI of three VA projects involving survey methodology (MRC 04-371; XVA 33-116; IIR 12-383-2, currently ongoing) as well as co-investigator on three additional project lending her survey methodology expertise (IIR 04-349, XVA 33-105; IIR 09-104) and online education. As an industrial/organizational psychologist, she is also trained in training evaluation, which constitutes the basis for the evaluation methods proposed in this application.

**Previous Pertinent Work:** Dr. Hysong is PI of a currently ongoing national evaluation of all the VA AFPHSR programs nationally, where data are currently being collected about the resources and needs of the programs as a whole, and where a similar CV abstraction methodology to the one proposed here is being applied to obtain career trajectory data for alumni of sites around the country. The work proposed herein is a more in-depth examination of our local fellowship program, using the framework of the national evaluation as a model. Data from the national evaluation will be used as benchmarks against which to compare the impact and success of our local fellowship program.

**E) Clear Methods of Assessment of Work Proposed (If Applicable)**

The work proposed is in and of itself an evaluation, so the methods of assessment have been described in detail in section B, the proposed plan of work.

**F) Timeline**

We expect this project to be completed in 12 months.

Tasks	Project Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Pilot web-based questionnaire												
Request list of fellows from OAA												
Archival Searches												
Recruitment and Collection of Survey Data and CVs												
CV Abstraction												
Linking of survey and CV data												
Data Analysis												
Final Report Preparation												

**G) Feasibility / Demonstration of Time and Ability to Complete the Activity**

We have already obtained IRB approval for this project, and have gathered an initial list from our program’s records of names of fellows; in addition, the web-based questionnaire is already available. Further, as part of the larger evaluation currently being led by Dr. Hysong, we will have access to a programmer and a methodologist to assist in data management and analysis. The present application would provide the needed additional resources at the data collection stage to ensure the highest response rates possible for our local fellowship program (we are targeting all 46 fellow alumni for participation), to avail ourselves of the largest possible sample for benchmarking our local program against the national data. The data collection stage of this project is the most laborious component of the project and thus requires additional support.

**H) Reference**

1.D. L. Kirkpatrick and J. D. Kirkpatrick. *Evaluating Training Programs: The Four Levels*, San Francisco, CA:Berrett-Koehler, 2006.

**BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD (DIRECT COSTS ONLY)**

BUDGET CATEGORY TOTALS	INITIAL BUDGET PERIOD	
PERSONNEL	5000.00	
CONSULTANT COSTS		
EQUIPMENT		
SUPPLIES		
TRAVEL		
TUITION, FEES FOR COURSE WORK		
OTHER EXPENSES		
TOTAL DIRECT COSTS		
<b>TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PROPROJECT PERIOD</b>		<b>\$ 5000.00</b>

## JUSTIFICATION

\$5000 are being requested for a research assistant to aid in data collection for this project. Specifically, the research assistant will perform profile searches of our program's alumni on professional social media platforms (e.g., LinkedIn, ResearchGate, etc.), bibliographic databases (e.g., Web of Science) and institution websites to obtain complete contact information and professional accomplishments data from our fellows. The research assistant will also aid in abstracting CV information into our database for analysis.

## PLAN OF DEMONSTRATION OF INFORMATION GAINED FROM PROPOSED WORK (IF APPLICABLE)

As part of the larger project, a final report will be prepared for the other grant funders. An in-depth report comparable in structure will be prepared describing the local fellowship program and its impact, which will be disseminated locally with our section and department leadership. In addition, results from the project will be submitted for presentation at the Annual Educational Innovations symposium (we have presented before on specific features of the fellowship program at this symposium, this would make a very suitable follow-on presentation). Finally, we will submit our findings for publication at suitable medical education journals, such as *Academic Medicine*.