# B. BACKGROUND AND GOALS FOR FELLOWSHIP TRAINING (six page limit)

## B1. Doctoral Dissertation and Research Experience

Briefly summarize your past research experience, results, and conclusions, and describe how that experience relates to the proposed fellowship. In some cases, a proposed fellowship may build directly on previous research experiences, results, and conclusions. In other situations, past research experiences may lead a candidate to apply for a fellowship in a new or different area of research. Do not list academic courses in this section.

Applicants with no research experience: Describe any other scientific experiences.

Advanced graduate students (i.e., those who have or will have completed their comprehensive examinations by the time of award): Include a narrative of your planned doctoral dissertation (may be preliminary).

Postdoctoral fellowship applicants: Specify which areas of your proposed research were part of your predoctoral thesis or dissertation and which, if any, were part of a previous postdoctoral project.

## B2. Training Goals and Objectives

Describe your overall training goals for the duration of the fellowship and how the proposed fellowship will enable the attainment of these goals.

Identify the skills, theories, conceptual approaches, etc. to be learned or enhanced during the award.

Discuss how the proposed research will facilitate your transition to the next career stage, if applicable.

## B3. Activities Planned

The activities planned under this award should be individually tailored and well-integrated with your research project.

Describe, by year, the activities (research, coursework, professional development, clinical activities, etc.) you will be involved in during the proposed award. Estimate the percentage of time to be devoted to each activity. The percentage should total 100 for each year.

Describe the research skills and techniques that you intend to learn during the award period.

Provide a timeline detailing the proposed research training, professional development, and clinical activities for the duration of the fellowship award. Detailed timelines of research activities involving animals, human subjects, or clinical trials are requested in other sections of the fellowship application and should not be included here. The timeline you provide here should be distinct from the Study Timeline in the PHS Human Subjects and Clinical Trials Information form.

If provided this NRSA award, my research training will consist of formal training, mentored research, and clinical efforts to complete the requirements of my clinical training in cardiovascular medicine at Emory University. This training grant will provide funding for the two research years of my fellowship between July 2016-June 2017 and June 2017-July 2018. The detailed activities that I will undertake during these two years are provided in **Table 1**. This training grant will provide funds for advanced coursework in epidemiology and grant writing at the Rollins School of Public Health to supplement my Master of Public Health degree. The selected coursework will enhance my understanding in advanced epidemiologic methods (EPI 738, EPI 739), advanced longitudinal data analysis (EPI 750), and grant writing (EPI 750). This coursework will allow me to gain in-depth knowledge in advanced statistical modeling and improve my ability to write grants. Additionally, as part of my research training I will attend biweekly epidemiology grand rounds, biweekly clinical cardiology grand rounds, and twice weekly clinical cardiology conferences. The proposed research will be presented at two national conferences yearly (e.g., AHA and ACC). The proposed research will be completed over the two years and detailed descriptions of my plan to complete this project are shown in **Table 1**. During the two years of funding, 65% of my time will be devoted to completing this project and presenting the findings at national meetings and preparing manuscripts. I will also attend weekly lab meetings with my primary sponsor, Dr. Vaccarino. Additionally, I will maintain a weekly outpatient cardiology clinic (1/2 day per week) to maintain my standing within the clinical fellowship program.

If provided this NRSA award, my research training will consist of formal training, mentored research, and clinical efforts to prepare me for an early career development award as a translational researcher. This training grant will provide funding for two additional research years between July 2020 and June 2022. The detailed activities that I will undertake during these two years are provided in Table 1. This training grant will provide funds for advanced coursework in epidemiology and biostatistics at the Rollins School of Public Health to supplement my Master of Science in Clinical Research degree. The selected coursework will enhance my understanding in advanced epidemiologic methods (EPI 538, EPI 545) and advanced longitudinal data analysis (BIOS 507, 532, 522). This will complement and strengthen my computational training, allowing me gain in-depth knowledge and skills in study design, advanced statistical modeling, and data interpretation. Additionally, as part of my research training I will attend biweekly epidemiology grand rounds, weekly cardiovascular grand rounds, and weekly medicine grand rounds.

Table 1. Detailed Effort for Activities Planned Under this Award

|  |  |  |
| --- | --- | --- |
| **Tasks** | Year 1 (% Effort) | Year 2 (% Effort) |
| Formal Training Plan |  |  |
| Formal Course Work |  |  |
| EPI 538 Advanced Epidemiological Methods I (2) | 10% |  |
| EPI 545 Advanced Epidemiological Methods II (4) |  | 10% |
| BIOS 507 Applied Regression Analysis (3) | 10% |  |
| BIOS 532 Statistical Computing (2) | 5% |  |
| BIOS 522 Survival Analysis Methods (2) |  | 5% |
| GAH 601 the Responsible Conduct of Research Ethics (1) | 1% | 1% |
| Didactic Conferences and Journal Clubs |  |  |
| Didactic Conference |  |  |
| Epidemiology Grand Rounds (biweekly) | 1% | 1% |
| Emory Heart and Vascular Grand Rounds (weekly) | 2% | 2% |
| Research-in-Progress | 1% | 1% |
| Directed reading in autonomic physiology | 5% | 5% |
| National Conferences |  |  |
| American Heart Association | 1% | 1% |
| Translational Science | 1% | 1% |
| American Heart Association Epidemiology | 1% |  |
| Computing in Cardiology |  | 1% |
| Total Training Effort | 38% | 28% |
| Research Plan |  |  |
| Specific Aim #1 |  |  |
| Parent study (Emory Biobank) data collection |  |  |
| Derive HRV from ECG signals |  |  |
| Data adjudication |  |  |
| Conference presentation and manuscript publication | 5% | 15% |
| Specific Aim #2 |  |  |
| Data analysis |  |  |
| Derive exploratory variables |  |  |
| Data adjudication |  |  |
| Conference presentation and manuscript publication | 5% | 15% |
| Specific Aim #3 |  |  |
| Collection of follow-up data |  | 10% |
| Conference presentation and manuscript publication |  | 10% |
| Research Training and Mentor Meetings |  |  |
| Total Research Effort |  |  |
| Clinical Effort |  |  |
| Inpatient General Medicine Service | 5% | 5% |
| Total Training, Research, and Clinical Effort |  |  |