ASSOCIATION FOR INSTITUTIONAL RESEARCH
Data and Decisions for Higher Education

Dear Gregory,

Thank you for submitting your proposal. A printable summary is below. Your confirmation number is 15523. A confirmation email will be sent to you within 24 hours.

Applicants will be notified of the status of the proposed project on February 2, 2017.

If you have questions or need assistance regarding your application please contact the AIR Grant staff at 850-391-7109 or grants@airweb.org.

SUMMARY

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Years of experience in IR	
IR Roles	
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Race/Ethnicity	
Gender	

Grant Type

I am applying for a:

Research Grant

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Project Description

Project title:

Strengthening the Graduate Education Pipeline through Diversity: Examining Factors that Influence Aspirations, Enrollment, and Completion

Statement of the research problem and national importance (limit 750 words):

- What is the research problem this proposal intends to address?
- How does this topic relate to the research priorities areas of access, affordability, and value of legal or graduate/professional education?
- Why is this topic of national importance?
- Why is it timely to conduct this research at this time?

RESEARCH PROBLEM

The proposed study addresses access and completion disparities in graduate education among students of different gender and racial/ethnic identities. This problem is gaining critical importance based on the combined influence of two concomitant trends.

First, as recent reports by Carnevale (2016a, 2016b) highlight, racial/ethnic disparities in undergraduate outcomes directly lead to disparities in access to graduate education, and that only after individuals attain a graduate degree do outcomes gaps converge in areas such as labor market success and earnings. Carnevale argues that the disproportionate concentration of racial/ethnic minorities in open-access colleges, which spend considerably less per student and amass substantially lower graduation rates compared to the nation's top colleges and universities, fuels this phenomenon. However, empirical evidence is needed to both validate these claims and recommend ways to ameliorate those factors that contribute to racial/ethnic- and gender-based disparities in graduate education.

Second, growth in graduate student enrollment is being driven by international students, fueled by the proliferating practice among U.S. colleges and universities to hire international recruitment agencies to expand and strengthen international markets of prospective graduate students (Goff & Snowden, 2015). These practices are institutional responses to concerns over declining domestic enrollments and highlight the need for a better understanding of college students' pathways into and through graduate education. While institutions have looked to new markets to attract students into graduate programs, we seek to identify factors that influence domestic students' likelihoods of aspiring to, enrolling in, and graduating from graduate and advanced professional programs.

Together, these trends provide powerful rationale for inquiry into the factors associated with students' pathways into and through graduate education, particularly among traditionally underrepresented graduate student populations. We have designed the proposed study specifically to address this problem.

NATIONAL IMPORTANCE

There are at least three reasons why this study holds national importance. First, achieving a better understanding of students' pathways into and through graduate and advanced professional degree programs is a significant issue for the national economy. The 2012 Pathways Through Graduate School and into Careers report estimated that by 2018 the U.S. will be home to 2.5 million new jobs requiring an advanced degree (Wendler, Bridgeman, Markle, Cline, Bell, McAllister, & Kent, 2012), emphasizing that the U.S. workforce depends on the higher education system to produce enough individuals with advanced degrees (Goff & Snowden, 2015).

Second, education attainment is a fundamental determinant of socioeconomic status (SES) and essential for individual social mobility (Blau & Duncan, 1967; NAEP, 2012). As bachelor's degree completion rates have risen in recent years (Kena, Musu-Gillette, et al., 2015), the attainment of a graduate degree has become a more important indicator of status in the years following college and an important mechanism whereby individuals positively differentiate themselves in the labor market. While variation exists by areas of study, graduate degree holders experience considerably lower unemployment and higher earnings relative to bachelor's degree holders (Carnevale, Cheah, & Strohl, 2012; Mayhew, Rockenbach, Bowman, Seifert, & Wolniak, 2016).

The third reason is rooted in social justice. The proposed study is significant in that we know little about the intersection of students' backgrounds and their pathways into graduate education. Graduate school attendance and completion are not equally distributed across students from different backgrounds. For example, according to recent Council of Graduate Schools reports (Allum & Okahana, 2015; Okahana, et al., 2016), women remain underrepresented in science- and engineering-related fields. Racial/ethnic disparities are also prevalent, where, among U.S. citizens and permanent residents, only one in four first-time fall 2015 graduate students were underrepresented minority students (including 12% Black/African American, and 10% Hispanic/Latino).

TIMELINESS

Given the substantial career, economic, and social justice implications of graduate degree attainment, we stand to benefit from a better understanding of the factors and mechanisms associated with the graduate school pipeline. In this vein, this proposal focuses on individuals who graduated college at the peak of the Great Recession in order to understand key factors that shaped their initial aspirations toward graduate school, their final decisions to enroll in graduate school, and their ultimate attainment of a graduate degree. Importantly, we focus on identifying malleable factors for translating findings into policies and institutional practices that attenuate the graduate education disparities found among many underserved populations. While not specific to legal education, we believe the results will be useful to law school admissions professionals in better understanding pathways to graduation education and the various factors that influence aspirations, enrollment, and completion across student populations.

Review the literature and establish a theoretical grounding for the research (limit 1000 words):

- What has prior research found about this problem?
- What is the theoretical/conceptual grounding for this research?

CONCEPTUAL GROUNDING

To study graduate education requires the synthesis of multiple theoretical perspectives. First, Breneman (1976) provided a useful foundation for

understanding the Ph.D. production process that has proven influential to the study of graduate school degree completion. Breneman's model builds on aspects of human capital theory (Becker, 1993) while incorporating institutional dimensions such as control and proxies for quality. Central to graduate degree production models is recognition of the differences in graduate education and the decision-making process by field of study. According to this framework, analytic models aimed at understanding aspects of graduate education should incorporate measures that affect rates of return on the educational investment, including, most notably, student demographic characteristics (sex, race/ethnicity), field of study, and institutional characteristics.

Second, Weidman's (2001) work on the socialization of graduate students suggests that academic and career development are determined by knowledge and skill acquisition, as well as students' dispositions towards the graduate school experience. By highlighting student dispositions, Weidman's model reinforces the social-psychological perspective that places educational aspirations at the center of models depicting social mobility (Jencks, Crouse, & Mueser, 1983; Haller & Portes, 1973; Sewell, Haller, & Portes, 1969; Sewell & Hauser, 1980), as well as higher education research on college choice and completion (St. John, Asker, & Hu, 2001; Stage & Hosser, 1989; Wells, et al., 2011). From the perspective of social reproduction theory, lower educational aspirations are also a key determinant of social and gender inequality (Alexander & Eckland, 1974; Kerckhoff, 1976). Other explanations point to the social capital students acquire from their family and community, as well as socioeconomic status (SES), to explain their educational aspirations, subsequent career choices, and additional education attainment (Reynolds & Burge, 2008). Within these broad conceptual relationships, the empirical evidence demonstrates the numerous factors that influence graduate education, which we review below.

PRIOR RESEARCH

Ascribed Background Factors

An abundance of research shows that an individual's ascribed characteristics such as gender, race/ethnicity, and family socioeconomic status (SES) are important determinants of educational aspirations, decision-making, and graduate enrollment and attainment (Ethington & Smart, 1986; Horvat, 2001; Mullen, et al., 2003; Paulsen & St. John, 2002; Perna, 2004). For example, focusing on gender, Perna (2004) examined longitudinal data of bachelor's degree recipients to investigate how graduate enrollment differed between men and women. Results indicate that although women represent a smaller proportion of enrollments in doctoral and first-professional programs than men, women are more often found in post-baccalaureate programs below the master's level and at the master's level. Evidence further suggests that although first-generation students do not participate in graduate education as much as their counterparts (Zhang, 2005), minorities enroll in graduate education at similar, if not higher rates than their non-minority counterparts (Perna, 2004). Additionally, studies have shown that family resources and, more generally, SES are important components in explaining students' likelihoods of graduate enrollment (Ethington & Smart, 1986).

Educational aspirations

Aspirations are meaningful in the context of graduate degree attainment because of their utility in forecasting graduate school enrollment (Eagen, et al., 2013; Heller, 2001; Mullen, et al., 2003). A substantial amount of literature has established that there is a pointed relationship between plans to enroll in graduate school and actual enrollment (Eagen, et al., 2013; Heller, 2001; Xu, 2016). Xu's (2016) examination of a nationally representative sample of college graduates in STEM majors found aspirations to be a crucial factor in understanding degree attainment and eventual job status. The influence of one's aspirations on their subsequent graduate education may also vary both in terms of ascribed background characteristics and achieved academic performance. (Davis, Ameline, Hirt, and Miyazki's, 2012). Furthermore, Black students demonstrate higher aspirations for graduate education than White students (Baum & O'Malley, 2003; Kaltenbaugh, St. John, & Starkey, 1999; St. John, Paulsen, & Carter, 2005).

Debt

The issue of undergraduate debt is an important factor in understanding why students choose to attend graduate school. Malcolm and Dowd (2012), for instance, found that cumulative undergraduate debt, in comparison to the debt carried by a student's graduating cohort, has a negative impact on graduate school enrollment in the STEM fields. This is corroborated by Perna's (2004) research, which found that undergraduate debt, especially as a proxy measure of a student's financial resources, can impact on how students approach the opportunity cost calculation of attending graduate school. Fox (1992), however, found that undergraduate debt may not necessarily dissuade students from attending graduate school; rather, undergraduate debt may shift the focus of graduate school towards doctoral study, as opposed to other post-baccalaureate programs. Additionally, undergraduate debt may be less of a perceived roadblock to graduate school enrollment for men than women (Fox, 1992).

Academic Achievement and College Student Experiences

A number of academic and institutional factors have been shown to predict whether students enroll in graduate school. Among the most important of these determinants are undergraduate academic performance, integration within the academic and social communities, academic major, and the selectivity of the undergraduate institution. Simply stated, students with higher undergraduate GPAs are more likely to enroll in graduate programs and complete a degree than students with lower GPAs (Bedard & Herman, 2008; Sibulkin & Butler, 2015). Academic integration has also been show to exhibit a direct, positive effect on graduate school enrollment (Hathaway, et al., 2002) through both informal (e.g., out-of-class meetings with professors) and formal (e.g., undergraduate research programs) experience (Davis, et al., 2012; Hathaway, et al., 2002; Micari & Pazos, 2012). Institutional differences, particularly undergraduate institution selectivity, are also important to predicting and understanding graduate school enrollment trends (Ethington & Smart, 1986; Mullen, et al., 2003).

Altogether, based on theoretical perspectives and empirical evidence, models predicting graduate education must include measures of academic achievements, ascribed sociodemographic characteristics, affordability characteristics, and social-psychological measures of educational aspirations. Given the influential role institutions are known to have on students' career and economic outcomes broadly, and graduate education attainment specifically, it is essential to also account for undergraduate institutional environments when examining graduate degree attainment.

Describe the research method that will be used (limit 1000 words):

- What are the research questions to be addressed?
- What is the proposed research methodology?
- What is the statistical model to be used?

RESEARCH QUESTIONS

Utilizing earlier theoretical and empirical writings, we conceptualize graduate education through a human capital, sociological, and social reproduction lens. In doing so, we place particular value on the role of ascribed, economic, achievement, and institutional factors that influence educational aspirations, enrollment propensities, and attainment in relation to graduate studies. We situate these factors within specific educational contexts that have been shown to influence and shape the educational pathways different students traverse as they navigate the graduate school decision-making process.

In operationalizing our conceptual framework, we ask three research questions to identify factors that influence students' aspirations to attend graduate school, their enrollment propensities, and their likelihood of completion. Thus, we examine students' pathways to graduate school at three critical milestones to investigate those factors most influential in determining student success, while paying particular attention to both disparities in educational access and completion, and the differential impact of our models across gender and racial/ethnic classifications.

Q1. In what ways do students' ascribed and achieved characteristics, debt accumulation, and educational experiences influence their aspirations to attain a graduate degree, controlling for institutional and regional characteristics. Are these characteristics conditional on students' gender and/or racial/ethnic classifications?

Q2. In what ways do students' ascribed and achieved characteristics, debt accumulation, and educational experiences influence their propensity to enroll in graduate school, controlling for institutional and regional characteristics. Are these characteristics conditional on students' gender and/or racial/ethnic classifications?

Q3. In what ways do students' ascribed and achieved characteristics, debt accumulation, and educational experiences influence their attainment of a graduate degree, controlling for institutional and regional characteristics. Are these characteristics conditional on students' gender and/or racial/ethnic classifications?

RESEARCH METHODOLOGY

Our methodology incorporates three analytical approaches necessary for answering the research questions. The first approach includes data conditioning and the development of scaled indices to be used in the inferential portion of the plan. The latter two approaches incorporate descriptive, bivariate, and multivariate steps to identify the influence of various individual- and school-level factors.

Phase 1: Data Conditioning

During this initial phase, we will condition the ELS dataset for analysis (see section 2e for detailed information on the dataset). We will recode and rename variables, conduct a missing data analysis, replace missing data using advanced multiple imputation methods (i.e., the Markov chain Monte Carlo (MCMC) iterative method, see Li, Raghunathan, & Rubin, 1991; Schafer, 1997), and transform and standardize select variables.

Phase 2: Descriptive and Bivariate Analysis

The second phase of our analytic plan incorporates descriptive and bivariate approaches. In addition to understanding the relevant means, standard deviations, and frequencies of the different variables under investigation, we will use a chi-square analysis and one-way ANOVA to examine whether significant differences are evident for particular groups based on their gender and race/ethnic identification, across pertinent variables in the analytic model. This phase of the analytic plan will provide a general understanding of group differences and will inform our interpretation of results from the final multivariate stage of analysis.

Phase 3: Multivariate Analysis

The third phase of analysis will directly address our research questions using logistic regression techniques and conditional effects modeling. We begin our multivariate approach by first examining the general effects of our models' variables across the three outcomes under investigation (i.e., aspirations, enrollment, and attainment of a graduate degree). The general effects model arrives at an estimated effect for each variable, averaged across all individuals in the sample. We will then rerun the model to identify how, or if, estimated effects vary based on students' gender or racial/ethnic identification. We refer to this second set of estimates as conditional effects. This approach has been widely used by higher education scholars to explore a variety of student- and institutional-level variables and may often be referred in studies as interaction or moderating effects (see Hayes, 2013; Jose, 2013; Mayhew, et al., 2016). The value in exploring conditional effects is in determining if subsets of students benefit most from a certain aspect of their backgrounds or educational experiences.

STATISTICAL MODEL

For each statistical models we will employ logistic regression to examine the general and conditional effects on graduate school aspirations (G_Asp in equations 1a and 1b), graduate school enrollment (G_Enroll in equations 2a and 2b), and graduate degree attainment (G_Attain in equations 3a and 3b). We will run all analyses using blocks of variables, including demographic variables (X), achievement and college involvement variables (A), debt accumulation (D), college major (M), and institutional control and selectivity (I). Controls for marital status, dependents, and region will also be included in all of the models (Z), as these factors are known to confound career, including graduate education, decision-making (Alon, Donahoe, & Tienda, 2001; Becker, 1974). We will then re-run each model on sub-samples defined according to each individual's gender and race/ethnicity (represented by vector X, see equations 1b, 2b, and 3b). This provides the mechanism to test whether the effects of our independent variables are conditional on gender and/or race/ethnicity.

$G\_Asp_i = a0 + a1(X)i + a2(A)i + a3(D)i + a4(M)i + a5(I)i + a6(Z)i + ei$ [Eq.1a]

$G\_Asp_{i,x} = b0 + b1(A)i,x + b2(D)i,x + b3(M)i,x + b4(I)i,x + b5(Z)i,x + \mu i,x$ [Eq.1b]

$$G\_Enroll_i = a0 + a1(X)i + a2(A)i + a3(D)i + a4(M)i + a5(I)i + a6(Z)i + ei \quad [Eq.2a]$$

$$G\_Enroll_{i,x} = b0 + b1(A)i,x + b2(D)i,x + b3(M)i,x + b4(I)i,x + b5(Z)i,x + \mu i,x \quad [Eq.2b]$$

$$G\_Attain_i = a0 + a1(X)i + a2(A)i + a3(D)i + a4(M)i + a5(I)i + a6(Z)i + ei \quad [Eq.3a]$$

$$G\_Attain_{i,x} = b0 + b1(A)i,x + b2(D)i,x + b3(M)i,x + b4(I)i,x + b5(Z)i,x + \mu i,x \quad [Eq.3b]$$

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Project Description - Appendix

Datasets

List the datasets that will be used and explain why they best serve this research (limit 500 words)

NCES DATASETS

Educational Longitudinal Study of 2002 (ELS: 2002)
Postsecondary Education Transcript Study (PETS)

WARRANT FOR DATASET USE

This study uses data collected through the Education Longitudinal Study (ELS) of 2002, a survey research project funded by U.S. Department of Education designed to explore students' transitions from secondary school into postsecondary education and subsequently into the workforce. The third and final follow-up of the ELS occurred in 2012 when the average age of the sample population was 26. The third follow-up included variables that specifically measured graduate school outcomes, including graduate school aspirations, enrollment, and attainment. Additional information will be provided through the Postsecondary Education Transcript Study (PETS), including college GPA and major.

Given the recent release of the final wave of the ELS: 2002 dataset, which included the PETS data, now is an opportune time to utilize the richness of this dataset to answer the proposal's research questions. The multiple waves of the ELS: 2002 dataset allows for an investigation into factors that influence educational aspirations, enrollment propensities, and attainment of graduate degrees. In particular, the PETS data provides full transcript details to examine students achieved characteristics and college major, complementing ELS: 2002 data contains critical information about students' background and socioeconomic characteristics, undergraduate institution attended, accumulated debt and monthly payments, college involvement experiences, and graduate school enrollment and attendance patterns. Utilizing the ELS: 2002 longitudinal panel weights also provides a unique opportunity to generalize our results to a national sample of high school students who attended and completed an undergraduate education.

Statement of use of restricted datasets (limit 250 words):

Applicants should provide a statement indicating whether the proposed research will require use of restricted datasets. If restricted datasets will be used, the plan for acquiring the appropriate license should be described.

If restricted datasets will not be used, leave this text box blank and click *Save and Continue*.

RESTRICTED ACCESS

The restricted data set is particularly necessary for this study in order to capture both the PETS transcript data and specific information about student debt and family socioeconomics. Both of the study's Principal Investigators have active restricted-use licenses with access to the full ELS:2002 dataset, attended NCES training related to the ELS:2002 dataset, and have been conducting research using the ELS: 2002 dataset for many years, as evident in their respective publication records.

Timeline and Deliverables

Timeline:

Provide a timeline of key project activities.

MARCH 1, 2017

1. Receive funding and initiate project activities.

MARCH – JULY, 2017

1. Complete Phase 1 (data conditioning) of the analysis plan.

2. Prepare and submit proposals for the Annual 2017 Access Group Legal Education Research Symposium, 2017 ASHE conference, and 2018 AERA conference based on preliminary results.

3. Submit first grant progress report (Deliverable 1).

AUGUST - DECEMBER, 2017

1. Complete Phase 2 (descriptive and bivariate analysis) and Phase 4 (multivariate analysis) of the analysis plan.

2. Interpret output.

3. Draft tables.

4. Prepare paper on graduate school aspirations to present at the annual ASHE conference (Deliverable 2).

5. Prepare presentation for Annual 2017 Access Group Legal Education Research Symposium (Deliverable 3).

6. Write preliminary results and document progress for mid-level report (Deliverable 1).

JANUARY - MAY, 2018

1. Finalize tables and results from all analytic phases.

2. Prepare paper on graduate school enrollment and attainment to present at the annual AERA conference (Deliverable 2).

3. Present paper at AERA conference in April.

4. Submit final report by April 30, 2018 (Deliverable 4).

Deliverables:

List deliverables such as research reports, books, and presentations that will be developed from this research initiative.

The proposed research project will yield four deliverables, including two research papers that will each be presented at national conferences and submitted for publication in refereed, peer-reviewed journals. The two remaining deliverables will include the mid-year and final grant reports.

DELIVERABLE 1

The first deliverable will be the mid-year progress reports due to ACCESS/AIR on July 1 and November 1, 2017. With these reports we will describe the progress made with the initial and mid-level stages of the research project and discuss the likelihood of completing the proposed research by the end of the grant cycle.

DELIVERABLE 2

We envision developing two research publications based on the models outlined above. We plan to submit the first manuscript in November of 2017, containing results from the models of graduation aspirations. The second manuscript will be submitted in April 2018, containing the combined results from the models of graduate enrollment and attainment. We will submit initial proposals to both the Association for the Study of Higher Education (ASHE) and the American Educational Research Association (AERA) in order to receive initial feedback prior to publication submission. We intend to submit the manuscripts to highly regarded journals, such as: American Educational Review Journal, Educational Evaluation and Policy Analysis, Journal of Higher Education, Review of Higher Education, Harvard Educational Review, or Teachers College Record.

DELIVERABLE 3

The third deliverable will include a presentation at the Annual 2017 Access Group Legal Education Research Symposium. The presentation will provide a synopsis and summary of the study.

DELIVERABLE 4

Our culminating deliverable will be the final research report due to Access/AIR by April 30, 2018. With this report we will provide an overview of each of the project's deliverables, formally present the research findings associated with research questions 1 – 3, and discuss implications of our findings for policy, theory, and future research.

Disseminate results:

Describe how you will disseminate the results of this research.
(Note: Costs of travel to meetings should be calculated on the budget page.)

The proposed project accompanies a three-part dissemination plan for reaching multiple audiences and stakeholders. At every juncture, we will acknowledge the support of the ACCESS/AIR Research Grant program.

First, results from the proposed project will be disseminated through peer-reviewed journals. The research paper deliverables described above will target different journals to increase exposure of this research to a wide range of scholars and practitioners interested in understanding the college-to-graduate education nexus. Specifically, we plan to produce two publication-ready articles based on the models described above, each presenting a critical stance for examining the conditional effects of our models in relation to gender and race/ethnicity. Journals we will consider for these papers include the following: Educational Evaluation and Policy Analysis, Teachers College Record, Research in Higher Education, Journal of Higher Education, Review of Higher Education, and Sociology of Education.

Second, to expose a broader cross-section of individuals to our research, versions of these papers will initially be presented at national conferences, including ASHE, AERA and the ACCESS/AIR Legal Symposium. Feedback from the conference presentations will be incorporated into each manuscript in advance of journal submission.

Third, accompanying conference presentations and journal publications, we will publically release summaries highlighting various stages of the research through the webpage hosted by NYU's Center for Research on Higher Education Outcomes (steinhardt.nyu.edu/crheo/). The center's webpage and affiliated projects are routinely featured and publicized through NYU's media platforms. Together, this three-part dissemination plan will enable the research and the sponsorship of ACCESS/AIR to reach numerous audiences and stakeholders.

IRB Statement

Statement of Institutional Review Board approval or exemption (limit 250 words):

As part of the proposal, a statement outlining a plan for Institutional Review Board (IRB) approval is required. The statement should outline the applicant's timeline and plan for submitting the proposal to an IRB or explain why IRB approval is not necessary. Final IRB action is not necessary prior to submitting the application.

As the project Lead PI, Dr. Gregory Wolniak will submit in January 2017 a description of this research to the University Committee on Activities Involving Human Subjects (UCAIHS), which serves as the Institutional Review Board (IRB) on New York University's Washington Square Campus. Because this project relies on secondary data analysis and involves negligible risk to the participants represented in the data, the project will be given "exempt" status from New York University's IRB. Protocol will be followed to receive IRB approval prior to the commencement of funded research.

Biographical Sketch(es)

Biographical sketch (limit 750 words):

There are two Co-Principal Investigators collaborating on this project. Both researchers have extensive experience analyzing and reporting on nationally representative data sets and are active members of the higher education research community, frequently publishing and presenting research on the associations between students' postsecondary experiences, conditions for learning, and career and economic outcomes. These researchers have worked together on a variety of previous projects, including a 2010 AIR grant, and have realized that each brings unique skills and perspectives such that their collaboration heightens the quality and value of their work.

Biographical sketch (limit 750 words):

GREGORY C. WOLNIAK, PH.D.

Dr. Wolniak is Associate Professor of Higher Education and Director of the Center for Research on Higher Education Outcomes (CRHEO) at New York University. Wolniak conducts research on the career and economic impacts of college, as well as the factors that influence students' pathways into college. His work is particularly geared towards understanding how college students' socioeconomic trajectories are affected by their experiences in college, their educational choices, and their institutional environments, and the degree to which learning and developmental gains students make during college translate to post-college outcomes.

Wolniak is co-author on the recently-released 3rd volume of How College Affects Students (Jossey-Bass), has published numerous articles on the earnings effects of the college experience, and has been Principal Investigator on several externally-funded projects, most recently a Spencer Foundation grant to improve the transparency in college cost reporting. Wolniak is on the Editorial Boards of the Journal of Higher Education, Research in Higher Education, and Sociology of Education, with recent publications appearing in Teachers College Record, Journal of Higher Education, Research in Higher Education, and Review of Higher Education. Prior to coming to NYU, Wolniak was a Senior Research Scientist with NORC at the University of Chicago.

As Lead-PI on the project, Wolniak will devote at least 6.6 percent time to the project to ensure successful completion of the full scope of the proposed tasks. Wolniak will oversee one part-time hourly graduate student research assistant, will lead all dissemination tasks, and will work in close coordination through bi-weekly meetings with Dr. Engberg (co-PI). As CRHEO director, Wolniak will draw on the full breadth of CRHEO's research capabilities to successfully complete the project and widely disseminate findings through social and traditional media platforms.

Biographical sketch (limit 750 words):

MARK E. ENGBERG, PH.D.

Dr. Engberg is a Professor of Higher Education at Loyola University Chicago. Engberg is an expert in research methodology, evaluation and assessment, and access and diversity-based research. He has published numerous articles that utilize NCES datasets, including NELS, ELS, and the more recent HSLS. In addition, Engberg has attended NCES training sessions on utilizing complex data samples and served as an external reviewer on NIH grant proposals. Examples of Engberg's scholarship can be found in recent issues of Research in Higher Education, Journal of Higher Education, Higher Education, and Teachers College Record.

Engberg's current research agenda is focused on college access and opportunity, with particular emphasis on investigating factors that facilitate educational pathways and support educational success for traditionally underserved populations. Engberg has also served as an enrollment

management consultant for numerous colleges, helping admission and enrollment professionals build relational databases and employ econometric analyses to simulate admission and financial aid strategies that achieve their goals for access and diversity.

As co-PI on the project, Engberg will devote 15 percent of his time to the project, overseeing and coordinating all aspects of the data analysis plan for this project. In particular, he will supervise the technical work of the project, including data conditioning and logistic modeling, and will collaborate on the design of the analyses, the interpretation of results, and the write-up and presentation of findings.

Budget

- Research Grant Budget Form

Funding History

Funding history (limit 250 words):

A statement of prior, current, and pending funding for the proposed research from all sources is required. The statement should also include a history of all prior funding from AIR to any of the PIs for any activity. Funding from other sources will not disqualify the application but may be considered in the funding decision.

GREGORY C. WOLNIAK, PH.D.

Prior Funding (representative partial list)

1. State of Our Nation's Youth Study
Funder: The Horatio Alger Association
Period of performance: 8/1/2015–11/30/2016
Amount: $108,242

2. Examining the STEM Pipeline among Underrepresented and Disadvantaged College Students
Funder: Center for Excellence in Survey Research
Period of performance: 2012–2013
Amount: $18,501

3. Understanding Educational Resilience and Factors Associated with College and Career Success
Funder: The Horatio Alger Association
Period of performance: 2010–2012
Amount: $330,000

4. Access to Postsecondary Education: The interrelationship among high school contexts and socioeconomic status
Funder: Association for Institutional Research, NSF, & NPEC
Award number: RG10-144
Period of performance: 2010-2012
Amount: $39,000

Current Funding

1. Improving Transparency in College Costs
Funder: Spencer Foundation
Period of performance: 5/1/2016–8/31/2017
Amount: $50,000 (3% effort)

Pending Funding

1. Understanding and Enhancing Career Development among Socially Mobile College Students
Funder: Horatio Alger Association
Period of performance: 2/1/2017–10/31/2018
Amount: $160,123 (15% effort)

2. Promoting Science Learning Through Classroom-based EEG Research
Funder: NSF
Period of performance: 4/1/2017–3/31/2021
Amount: $ 1,771,052 (4% effort)

MARK E. ENGBERG, PH.D.

Prior Funding

1. Evaluation of the TNT academic coaches

Funder: Gear-Up
Period of performance: 1/1/2014–12/31/2016
Amount: $10,000.00

2. Using assessment more strategically to improve student learning and development
Funder: Teagle Foundation
Period of performance: 1/1/2013–12/31/2013
Amount: $5,000.00

3. Access to Postsecondary Education: The interrelationship among high school contexts and socioeconomic status
Funder: Association for Institutional Research, NSF, & NPEC
Award number: RG10-144
Period of performance: 2010–2012
Amount: $39,000

Dissertation Advisor Letter of Support

There are no files attached.

Research Grant
Proposal Budget Form

Name Gregory Wolniak, New York University

Personnel - Salary

Principal Investigator	$ 16,958.00
Second Principal Investigator	$ 22,000.00
Third Principal Investigator	$
Graduate Research Assistant	$ 8,288.00

Travel

2017 Access Group Legal Education Research symposium:	$ 2,616.00
Other research related travel:	$ 0.00

(***Note***: Other planned travel should be listed in the "Timelines and Deliverables" section)

Other research expenses

Please provide a breakdown of expenses below and add the total value in the box to the right. Allowable expenses include: materials, such as software, books, supplies, etc.; consultant services, such as transcription, analysis, external researchers, etc.; and costs for publishing articles in journals. The purchase of computer hardware, overhead or indirect costs, and living expenses are not allowable. If you have questions about specific expenditures, please contact AIR.

$ 0.00

REQUESTED – Maximum Allowable is $50,000 $ 49,862.00