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| Adjusted Allocation | 0.00 |
| Remaining            | -75,000.00 |
**Application**

Beachwood City (043554) - Cuyahoga County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (338)

Applicants shall respond to the prompts or questions in the areas listed below in a narrative form.

**A) APPLICANT INFORMATION - General Information, Experience and Capacity**

1. **Project Title:** University Hospitals/Beachwood High School Medical Academy

2. Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

   The purpose of the University Hospitals/Beachwood High School Medical Academy program is to provide the optimal academic and experiential foundation for students who will pursue professional careers in the medical and/or healthcare field by immersing them in a rigorous and varied curriculum, housed in Beachwood High School and multiple sites within the University Hospitals healthcare system. The Medical Academy will be a multi-year program tailored to prepare learners for post-secondary studies in the medical and/or healthcare field by permitting and encouraging them to transition seamlessly from academic mastery to applied learning experiences within the context of a premier health care institution. The Straight A Fund goal addressed will be "Student Achievement."

3. **Total Students Impacted:**

4. **4. Lead applicant primary contact: - Provide the following information:**

   First Name, Last Name of contact for lead applicant: Ken Veon
   Organizational name of lead applicant: Beachwood City Schools
   Unique Identifier (RN/Fed Tax ID): 043554
   Address of lead applicant: 24601 Fairmount Blvd. Beachwood, OH 44122
   Phone Number of lead applicant: 216-464-2600
   Email Address of lead applicant: kev@beachwoodschools.org

5. **Secondary applicant contact: - Provide the following information, if applicable:**

   First Name, Last Name of contact for secondary applicant: N/A
   Organizational name of secondary applicant: N/A
   Unique Identifier (RN/Fed Tax ID): N/A
   Address of secondary applicant: N/A
   Phone number of secondary applicant: N/A
   Email address of secondary applicant: N/A

6. **List all other participating entities by name:** Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (RN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

   * Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

   * If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

   UploadGrantApplicationAttachment.aspx

8. **Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.**

   The project team includes administrators from Beachwood City Schools and University Hospital Health System. It is composed of individuals who possess a wealth of information in the fields of education and health care. The Beachwood Schools team consists of experts in the areas of curriculum, instruction, leadership, management, and finance. Collectively, it has a long and extensive history of developing and managing innovative educational programming designed to address a varied multitude of educational needs over several decades in various school districts. Currently, the Beachwood City School District serves as the fiscal agent for several Tech Prep consortium units enrolling students from nine area school districts including Beachwood. The district also houses several special education units that enroll students from throughout Northeast Ohio. As fiscal agent, Beachwood oversees the annual budget for these programs, totaling $4-$5 million dollars. That fiscal experience, coupled with Beachwood's history of perfect audits and its Aaa bond rating, serve as evidence of its ability to manage effectively any potential Straight A funding. The UH team consists of hospital administrators, doctors, and nurses. UH's primary facility is University Hospitals Case Medical Center (UHCMC), which is an academic medical center and one of the foremost teaching hospitals in the region. As a teaching hospital, UHCMC is preeminently suited for collaboration with Beachwood City Schools. In addition to UHCMC, UH is made up of five wholly owned community hospitals at six locations, three joint venture hospitals, 21 health centers, over 4,000 medical providers, more than 14,000 non-physician employees, and seven clinical-care delivery institutes. UH's success with its educational programs involving college and graduate medical students offers promise that it will achieve similar results with well-prepared younger ones.

**B) PROJECT DESCRIPTION - Overall description of project and alignment with Outcomes**

9. **Which of the stated Straight A Fund goals does the proposal aim to achieve?** - (Check all that apply)

   - Student achievement
   - Spending reductions in the five-year fiscal forecast
   - Utilization of a greater share of resources in the classroom

10. **Which of the following best describes the proposed project?** - (Select one:)

   - New - never before implemented
   - Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments
   - Mixed Concept - incorporates new and existing elements
   - Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

11. **Describe the innovative project.**

   Good doctors are a necessity in the United States with its aging population and rising percentage of senior citizens. Yet, many young people who pursue professional careers in the field of medicine never complete their training. Nationally, drop-out rates of Pre-Med majors are among the highest of any field. The Medical Academy will be a uniquely powerful collaboration between Beachwood City Schools and University Hospitals that will harness the respective strengths and resources of both institutions resulting in a synergistic program of rigorous academic preparation for students contemplating careers in medicine at the post-secondary level. The purpose of the Academy will be to equip students for the challenging post-secondary curriculum associated with such medical careers. BHS graduates who complete the Academy will be uniquely qualified to pursue professional careers in medicine with a heightened level of academic confidence and preparedness and consequent opportunity for success in their college programs. The Medical Academy will be a Grade 9 through Grade 12 STEM (Science Technology Engineering Math) program housed at Beachwood High School with some of the specialized higher level courses and/or laboratory experiences housed at appropriate University Hospitals facilities. Students will enroll in the program upon satisfactory completion of academic prerequisites, coupled with parental approval and recommendation from a guidance counselor. Potential candidates for the Academy will receive written information related to the Academy that will offer a clear explanation of academic components and associated expectations. Underclassmen in the Medical Academy will be taught by select BHS teachers in the areas of Science and Math. The curriculum will consist of Honors level and Advanced Placement courses that constitute a strong academic foundation for professional careers in the medical fields. Advanced laboratory courses will constitute a critical element. During the senior year, students can participate in related instructional and applied programs at selected University Hospitals training sites. Such opportunities, overseen and taught by UH personnel, subject to the educational oversight and approval of BHS, can afford high school credit through the Ohio Department of Education's Credit Flex program with the approval of a course template and associated program activities by an appropriate BHS Credit Flex Committee (subject area specialist, guidance counselor, and administrator). Such UH site-based learning opportunities may also qualify for service credit hours.
The implementation of the Academy represents cost shifting for Beachwood High School. Teachers who are often overlooked in the traditional K-12 public school setting. This program will not only serve to demonstrate student achievement within particular subject areas; it will afford students the opportunity to acquire and master knowledge beyond those subject areas and to apply that knowledge to the study of medicine through real and meaningful activities. A portion of the assessments used to demonstrate Student Achievement will come through the normal assessment cycle of students who are enrolled in the Academy. Such students will be subject to the same battery of state tests and the same Advanced Placement examinations as their peers who are not enrolled in the Academy. While we can benchmark them against such peers, such a comparison has but limited worth. It would be difficult, if not impossible, to demonstrate that participation in the Academy serves as the independent variable in such a comparison. It is a safe assumption, based upon historical data, that both groups will do well on such measures of student achievement.

In addition, to advanced high school course offerings, Academy students will be afforded the opportunity to apply their knowledge in hospital settings through internships, field student assignments, volunteer activities, and Credit Flex courses at select University Hospitals sites. Such experiences will greatly broaden their knowledge of the health care industry and provide them with insights that few high school students possess. The resultant formative and summative assessments of their performance by those within the health care industry will serve as documentation of their progress and success. Ultimately, one of the surest indicators of student success will be the data provided by students who successfully complete the program and move on to pre-med programs in college. The degree to which they feel confident and prepared, successfully navigate the college curriculum, and ultimately graduate to enter medical school will be our most compelling evidence of ultimate success. In an effort to gather such information, we will develop and maintain a database of students enrolled in the Academy so that we can maintain contact with them throughout their college careers. Such contact will include surveys and interviews designed to gather information related to their academic preparedness, progress achieved within their chosen field, the role that the Academy may have played in their success, and suggestions for improving the Academy program.

The Straight A Fund goal that is addressed by our proposal is Student Achievement. Ironically, we are attempting to enhance student achievement among our highest performing students; yet they are precisely the ones who are often overlooked in the traditional K-12 public school setting. This program will not only serve to demonstrate student achievement within particular subject areas; it will afford students the opportunity to acquire and master knowledge beyond those subject areas and to apply that knowledge to the study of medicine through real and meaningful activities. A portion of the assessments used to demonstrate Student Achievement will come through the normal assessment cycle of students who are enrolled in the Academy. Such students will be subject to the same battery of state tests and the same Advanced Placement examinations as their peers who are not enrolled in the Academy. While we can benchmark them against such peers, such a comparison has but limited worth. It would be difficult, if not impossible, to demonstrate that participation in the Academy serves as the independent variable in such a comparison. It is a safe assumption, based upon historical data, that both groups will do well on such measures of student achievement.

The University Hospitals/Beachwood High School Medical Academy is a self-sustaining, innovative, sustainable, transformational program model. In collaboration with University Hospitals, we will provide a unique model of unparalleled academic support for a public school system with a community health care provider.

The new and recurring costs will be the salary and benefits for the Medical Academy Coordinator. As noted elsewhere, these costs will increase in years three and four of program implementation as the person’s FTE status rises from half to full-time. However, pending documented success of the Academy, it is anticipated that UW will assume the cost of the Coordinator’s salary and associated benefits following the grant funding period.

The total cost of implementation represents a true investment of resources by both the Beachwood City School District and University Hospitals. The willingness of UW to offer its facilities as sites for field trips, internships, and formal instructional space represents a significant financial commitment. Implementation of the Academy represents cost shifting for Beachwood High School. Teachers who instruct honors and AP level science and math courses taught by Academy students as part of that program’s curriculum would still be teaching such courses if the Academy were nonexistent. Thus, the inclusion of a portion of those teachers’ salaries and benefits in the Medical Academy budget does not represent actual additional expense.

This is a cost neutral venture for Beachwood City Schools. However, it constitutes a major increase in learning opportunities and associated programming for students in the fields of science and math because it harnesses the resources of University Hospitals Health System. Long term, the Medical Academy could yield a genuine and sizable cost savings if it evolves into a multi-disciplinary consortium. As such, program costs could be divided among several participating school districts that could send students accepted into the program to complete the math and science portions of the program at Beachwood High School, thereby reducing costs and yielding a benefit to all who participate. Beachwood is familiar with such consortium models in career tech and special education, serving as both a participant and a host to several.

The University Hospitals/Beachwood High School Medical Academy will be self-sustaining program with a portion of funding that will be covered by the Straight A Fund is anticipated to be replaced by funding from UW itself. That funding will be used to cover the cost of the Academy Coordinator which is expected to increase commensurate with the growth of the program from a .5 FTE Coordinator to a full-time Coordinator in years three and four of the program’s existence. Other operational costs associated with personnel and facilities will remain the responsibility of UW and the Beachwood City School District.

D) IMPLEMENTATION - Timeline, communication and contingency planning

**Planning Phase (December 18, 2013 to July 1, 2014.)** Beachwood City Schools administration met with University Hospitals administration and legal counsel to propose the University Hospitals/Beachwood High School Medical Academy and agreed in principle to proceed with planning at the start of the current (2013-2014) school year. Beachwood High School instructors are being identified to teach the associated math and science curriculum and new electives are being proposed which will augment existing curriculum.

**Implementation (MM/DD/YYYY): 01/14/2014**

**Narrative explanation**

In January 2014, the Academy program will be presented to the Board of Education and the appropriate UW personnel for approval. With the appropriate teacher assignments and course adjustments in place, a Coordinator (funded by Straight A dollars) will be secured. The Academy program scope and sequence will be defined and finalized. New courses with corresponding curriculum will be developed. Because the Academy’s first enrollees will be primarily Freshman students from the Class of 2017, the maturation timeline for the program to achieve full capacity will extend to August 2015. Thus, the FTE of the coordinator would begin as a .5 assignment for years one and two with the understanding that the start-up and implementation of the program would
<table>
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<td>* Narrative explanation</td>
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<td>Summative evaluation of the Academy will occur on an annual basis and will include both quantitative and qualitative data. The former will incorporate state-mandated criterion-referenced tests, teacher-crafted assessments, and Advanced Placement examinations. Qualitative methods will include student, staff, and UH personnel surveys. Long term, alumni interviews will be conducted to learn the effects of the Medical Academy learning experiences on students’ eventual success in pre-med college programs of study.</td>
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19. Describe the expected changes to the instructional or organizational practices in your institution.

The UH/BHS Medical Academy represents a significant innovation in programming and resultant instruction for high-performing college-bound students. It borrows from an applied model of active learning more common in a Tech Prep or vocational setting. The resultant program offerings are less site-restricted, occurring at multiple sites in different locations depending upon the nature and purpose of the specific programming component. The activities promote real-world engagement of learners as they apply knowledge and skills to solve real-life problems. Such applied activities contribute greatly to the relevancy of learning. While other partnerships exist between school systems and health care institutions, none represent the degree of immersion inherent in this program. The result will be the inspiration of learning through doing.

**E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication**

20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

It’s no secret that many enter college with the idea of pursuing medicine, but a much smaller number graduate with these same aspirations. It is understandable that some will drop this career path because they find they have no interest in the field or don’t wish to put in the time it takes to learn difficult concepts. But these reasons do not account for all the students who drop the pre-med track by sophomore year* (Natalie Colonier, The Dartmouth, January 12, 2012). The University Hospitals/Beachwood High School Medical Academy seeks to lessen the chances that students who leave Beachwood High School to pursue medical careers will suffer such a fate. In developing the University Hospitals/Beachwood High School Medical Academy, Beachwood staff interviewed Beachwood graduates who entered pre-med college programs. Their comments and suggestions, based upon personal experience, have influenced our model. We are also aware of other models of collaboration between school systems and health care institutions. However, none match the level of immersion inherent in ours. The closest in theory seems to be the American Heritage School Medical Professionals Program in Boca Raton. This private college-prep institution hosts a defined curriculum and prescribed course sequence, however, it lacks the highly valuable collaborative component that is offered to Beachwood by University Hospitals. Other examples of hospital/school cooperation take the form of health clinics on school grounds and summer medical camp experiences for prospective doctors. However, we know of no model that so seamlessly combines the multiple resources (personnel, capital, and intellectual) of a hospital and a high school as effectively as ours.

21. Is this project able to be replicated in other districts in Ohio?

Yes

22. If so, how?

Beachwood can easily recreate the steps undertaken to implement the University Hospitals/Beachwood City Schools Medical Academy model by describing in detail the process of engaging in conversations with a health care entity, aligning and expanding curricular offerings, and collaboratively preparing a palette of applied learning, immersion opportunities with the partnering institution. Beachwood plans to showcase and market the Medical Academy model at state and national conferences. The model’s ability to be replicated will be a major factor in its appeal to others. Also, as noted in an earlier response, the Academy model could easily be expanded into a consortium to permit multiple school districts to participate if such an arrangement were aligned with the wishes of the founding entities, in this case, University Hospitals Health System and the Beachwood City Schools Board of Education.

23. Describe the substantial value and lasting impact that the project hopes to achieve.

The Medical Academy Model serves as an excellent example of adding value to an educational program. That value comes in the form of unique learning opportunities for high school students afforded by University Hospitals. The institution’s resources compound those of the schools alone. UH’s personnel, facilities, equipment, and the educational programming created with Beachwood City Schools open a world of opportunity that would otherwise be unavailable to high school students. Hopefully too, the Medical Academy program will expose doctors and professors to student talent that may be retained or noticed to return to Northeast Ohio to pursue careers. One cannot minimize the significance of the relational importance of this program that allows students to know personally practitioners in the medical field. Ultimately the truest measure of the program’s success will be its effectiveness in preparing students for rigorous pre-med college programs. While the immediate beneficiaries of the program will be the high school students who participate in it, the real beneficiaries with be the doctors and health care professionals whose academic journey included the University Hospitals/Beachwood High School Medical Academy. Their success in their chosen field, and ultimately the welfare of the patients whom they serve, will attest to the Academy’s lasting worth.

24. What are the specific benchmarks related to the fund goals identified in question 9 that the project aims to achieve in five years? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

**Short-term - Completion of Academy Curriculum and Program of Studies by June 2014. - Creation of spectrum of viable UH placement opportunities for BHS students by June 2014. - Enrollment goal of 35 students in program by June 2014 for 2014-2015 school year. Long-term - Increasing enrollment of Beachwood High School students in Medical Academy by 25% annually. - Increasing percentage of BHS students earning 5 or more high school credits in science by 25%. - Increasing percentage of BHS students earning 5 or more high school credits in math by 25%, - Increase success rate of Academy-graduated college freshmen in pre-med track to matriculate in sophomore pre-med status at a rate 50% higher than the national average rate.**

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

**Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the program’s progress).**

* Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.

The impact of the University Hospitals/Beachwood High School Medical Academy will be evaluated by a host of measures, both quantitative and qualitative, that yield a host of information. These include student performance results: - Traditional teacher-generated academic assessments of a formative and summative nature (ongoing). - End-of-Course Exams (annually). - Advanced Placement Examinations (annually). - Credit-flex course grades (semester/annually). - Internship assessments/grades (quarterly, semester). - Volunteer experience evaluations (periodic). The evaluation instruments will also include surveys of those involved with the program: - Instructor/Hospital staff feedback questionnaires, - Student participant surveys, - Alumni surveys of graduated who participated in the program. Additionally, success will be validated by: - Continued annual funding of the program Coordinator by UH - Successful marketing of the Academy as an example of educational reform and collaboration on the state and national stages. Quantitative indicators of success will abound in the form of student assessments. However, this program greatly broadens and redefines the meaning of student performance as it applies to a traditional high school setting; it does not seek merely to accelerate it. Accordingly, the qualitative research elements manifested in the surveys of participants and graduates, will be equally important in determining the program’s long-term efficacy. Ultimately, the single most compelling piece of quantitative data will be the percentage of Beachwood students who pass through this program and successfully graduate from college to enter medical school compared to the general population of college students nationally who declare as pre-med majors. The Medical Academy, like any academic endeavor will be in a healthy continuous state of change, revision, and enhancement. Each new component will present new opportunities for growth. Change will be, in many ways, exponential. The resources available through the Beachwood City School District and University Hospitals are abundant. By coupling two entities, both with reputations for excellence in their respective fields, we believe that the resultant fund program will constitute a highly innovative educational opportunity and thereby qualify as a deserving recipient of Straight A Fund support.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant agency and/or all identified partners to abide by all assurances outlined in the Assurance section of the CCIP. In the box below, enter “I Accept” and indicate your name, title, agency/organization and today’s date.

Accep Ken Veon Director of Curriculum and Technology Beachwood City Schools 10/25/13