DATE OF APPLICATION: AUGUST 15, 2012

DR. PERCY JULIAN SCHOOL OF SCIENCE AND MATHEMATICS GLOBAL CHARTER SCHOOL

LETTER OF INTENT

PREAMBLE

Cliff Chuang, Director
New York State Education Department
The Regents of the University of the State of New York
Charter School Office
Albany, New York 12234

Dear Mr. Chuang:

With this letter of intent, we hereby apply for a charter school to be located within the New York City Public School CSD 16. Our proposed middle school is based on the achievements of Dr. Percy Julian -the first African American research chemist and pioneer in the chemical synthesis of medicinal drugs from plants. As the first American chemist to synthesize the natural product physostigmine, Dr. Julian pioneered the first large-scale chemical synthesis of the human hormones - steroids, progesterone and testosterone, from plant sterols such as stigmasterol and sitosterol. His work would lay the foundation for the steroid drug industry's production of cortisone and other corticosteroids. Our goal at Dr. Percy Julian School of Science and Mathematics Global Charter School is to prepare all students for the 21st century based on Dr. Julian's principles of making a contributing difference to society through math and science innovations. Our school is dedicated to rigorous instruction, application of new standards and raising the bar for quality academics. We endeavor to expose traditionally under-served students to science, technology and global affairs and foster intellectual curiosity, international awareness and civic engagement.
Thank you.
Yours truly,
Nathaniel Haynesworth
Nathaniel Haynesworth

I. Applicant Information

a. Lead Applicant/Media Contact
Nathaniel Haynesworth, B.A., M.S., PhD Candidate
[redacted]
Contact Telephone: (215) 266-9276 email: haynn301@newschool.edu
Nathaniel Haynesworth is a versatile professional with over 10+ years experience, in streamlining business processes in various industries and analyzing and resolving systems and operational problems. Nathaniel is very passionate about public education reform in high-need communities and committed to work towards re-imagining schools and learning.

b. Founding Group: 500 Men Making a Difference

Founding Member	Expertise	Anticipated Role
Wayne Devonish	Real Estate Investment	Board of Trustees
Nathaniel Haynesworth	Education Policy/Strategic Planning	Board of Trustees
Fernando Lawrence	Education Advocacy	Board of Trustees
Barbara Williams	Organization Behavior/Effectiveness	Board of Trustees
Darryl Pearson	Information Technology/Mentoring	Board of Trustees
Bryant McInnis	Educator/Administrator	Board of Trustees
Lorrie Ayers	Parent Coordinator/Parent Advocacy	Board of Trustees
Kristin D. Carpenter	Arts-In-Education/Program Specialist	Arts Program Director

c. Board of Trustees
Wayne Devonish; Cyriac St. Vil; Fernando Lawrence; Darryl Pearson; Nathaniel Haynesworth; Bryant McInnis

d. Replication or Network Information
Dr. Percy Julian School of Science and Mathematics Global Charter School's proposal is not a replication of another charter school model nor is it proposed to be part of a charter school network.

e. Applicant History:
Neither one of the founding members have applied to NYSED or to another charter entity to open a charter school, either in New York State or outside of New York State.

II. Proposed Charter School Information

a. Proposed School Name & Location

The proposed school name is Dr. Percy Julian School of Science and Mathematics Global Charter School. The proposed school location is Bedford-Stuyvesant, Brooklyn which is within Community School District 16 in New York City. We plan to lease a private facility that meets all guidelines as an educational facility and has all of the required Certificates of Occupancy.

b. Planned Grades Levels & Student Enrollment

The first year of operation will serve Sixth Grade students; in each of the two years following, a grade will be added up to Eighth Grade.

Project Enrollment Table

Grades	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Sixth Grade	125	125	125	125	125
Seventh Grade	0	125	125	125	125
Eighth Grade	0	0	125	125	125
Total	125	250	375	375	375

c. Management or Partner Organizations

Dr. Percy Julian School of Science and Mathematics Global Charter School does not plan to partner with an existing charter management organization. The proposed school will work independently but consult with SchoolWorks Consulting Services and Charter School Business Management. Furthermore, the proposed school will seek membership in Asia Society's International Studies Schools Network. The International Studies Schools Network is a national network of design-driven public schools that are achieving success in attaining their core mission: to develop college-ready, globally competent graduates. The International Studies Schools Network has been working aggressively towards a nationwide commitment to make international knowledge and skills a top priority, creating models and resources for schools around the United States and engaging U.S. education leaders with their counterparts in Asia and around the world. Conversations have also begun with officials from Polytechnic Institute of New York University, American Museum of Natural History, NASA's Education Program and Project Lead the Way as being central post-secondary partners to the school. Partnering with such a college and leading education organizations will further the rigorous relevant academic opportunities for the science and mathematics experiential learning community at Dr. Percy Julian School of Science and Mathematics Global Charter School.

d. Proposed School Mission

The mission of the Dr. Percy Julian School of Science and Mathematics Global Charter School is to graduate young men and women who are well prepared for admission to competitive high schools and colleges. In honor of Dr. Julian's legacy, we strive to empower the future leaders of Dr. Percy Julian School of Science and Mathematics Global Charter School with highly desirable science, technology, and engineering and mathematics skills as well as cultivate thoughtful, ethical and confident citizens with global competence.

e. School Overview

Every aspect of Dr. Percy Julian School of Science and Mathematics Global Charter School's design serves to enhance academic rigors and promote student learning and achievement. Our school will focus implement the STEM curriculum. A typical student's day will be saturated with data-driven instruction. Lesson plans will be developed from diagnostic, interim, benchmark and summative assessments. World-class education data analysis programs will help teachers identify and prepare lessons appropriate for students with varying skill sets. Professional development through Project Lead the Way - the nation's leading activities, project and problem-based (APPB) program for middle and high school STEM education, will train our teachers to help students promote critical thinking, creativity, innovation and real-world problem solving that are aligned with NYS P-12 Common Core Learning Standards. Our school model is designed to provide all students with an appropriate and academically rigorous education with an international focus on literacy, science and mathematical skills, which we believe, are the critical building blocks for academic success.

Dr. Percy Julian School of Science and Mathematics Global Charter School will offer a program that enhances the lives of students and staff by encouraging and teaching responsibility, knowledge building and leadership skills and attitudes necessary to be successful, contributing members of a global society.

Our educational program is exclusively designed to increase the academic achievement among at-risk middle school children especially ELL and students with special needs. To achieve our educational goals, we will implement an educational program that sets the highest standards in New York City middle schools for rigorous, focused and engaging study. Our programs will develop students' innovative, collaborative, critical-thinking and problem-solving skills, in order to prepare them for success in high school and beyond.

The curriculum and instruction we will use to increase student achievement will employ NYS P-12 Common Core Learning Standard in English, History, Mathematics, Science, and Technology. Additionally, we will use a collaborative team teaching approach to promote problem-based, inquiry and lab-based learning through the content areas. To emphasize our relentless goal of increasing student achievement and engagement of STEM subjects to underserved populations, we will implement an innovative, project-based, interdisciplinary approach to foster STEM Literacy defined by The Asia Society Partnership for Global Learning:

- *Science and technology-based*: requiring scientific and technology literacy.
- *Resource-challenged*: in need of critical thinking about sustainable economies,
- *Globally interdependent*: requiring global knowledge and skills as core competence.
- *Innovation-driven*: placing high value on creativity and knowing how to learn.

Students will become STEM-literate, i.e., proficient in all subjects via a wide range of hands-on, project-based, team-taught interdisciplinary activities provided in the classroom, the American Museum of Natural History and Polytechnic Institute of New York University. Dr. Percy Julian School of Science and Mathematics Global Charter School students will benefit from our partnerships within the growing high-tech hub in downtown Brooklyn. Furthermore, we will utilize technology to create virtual connections via SKYPE with learning communities around the globe (i.e., Bashu Middle School #2, Chongqing, China).

We will incorporate common planning time for our teachers to enable them to regularly communicate with one another regarding: integrated curriculum content, team-teaching and planning frequent field trips for workplace and lab-based learning. We will establish a highly-interactive learning community which embraces students, parents, and the CSD-16 community by implementing performance based assessment components, and providing opportunities for parents to meet with all of their children's teachers with ease.

Our unique model maximizes real world exposure through STEM professional advisers. Students will experience enrichment activities, myriad opportunities to participate in regional, national and international science fairs, other STEM-related competitions (e.g., NASA STEM Design Challenge) and independent study projects (e.g., American Museum of Natural History's Lang Science Program), that will be supervised by faculty and mentors. The STEM model that Dr. Percy Julian School of Science and Mathematics Global Charter

School proposes to use compels students to acquire dynamic leadership and organizational skills to think and work in the context of systems. Effective use of the model will enhance student's ability to work collaboratively using critical-thinking and project management skills.

f. School's Target Population

The 9907 total student population of Community School District 16 (CSD 16) is our target population. The following data indicates a severe need for our proposed high performing charter school with a strong instructional emphasis on ELA and Math to serve the primary population of African American and Hispanic citizens in CSD 16. According to the New York State District Report Card (April 20, 2012) for 2010-2011, the current population of CSD 16 comprises of American Indian/Alaska Native, 1%, Black or African American, 82%, Hispanic or Latino, 15%, Asian or Native Hawaiian/Other Pacific Islander,1%, White 1%, Multiracial,0%. As indicated on the NYS District Report Card for Community School District 16. As indicated on the NYS District Report Card for CSD 16, 75 % of students are eligible for free lunch and 5% are eligible for reduced lunch. CSD 16 receives Title I funding. English Language Learners (ELL) comprise 4% of the students in this district. Based on the statistics, this district is predominantly African American with a growing number of Hispanic/Latino and Asian/Native Hawaiian students. CSD 16 has been identified on New York State's district accountability system, which is divided into a Federal Title I component and a State component as a District in Need of Improvement in English Language Arts (ELA) and graduation rates for 2011-2012. The percentage of students that scored at or above a level 3 on the ELA Exam is 26% in sixth grade, 18% in seventh grade and 23% in eighth grade. The percentage of students that scored at or above a level 3 on the Math Exam is 38% in sixth grade, 35% in seventh grade and 38% in eighth grade. Students with Disabilities and English Language Learners (ELL) have not made Adequate Yearly Progress (AYP) in both ELA and Math. The percentage of Student with Disabilities that scored at or above a level 3 on the NYS ELA and Math Exam is 22% in ELA and 12% in Math for sixth grade; 5% in ELA and 17% in Math for seventh grade; and 3% in ELA and 15% in Math for eighth grade.

III. Enrollment and retention of students with disabilities, English language Learners, and students who are eligible applicants' free and reduced price lunch program.

Dr. Percy Julian School of Science and Mathematics Global Charter School will conduct targeted outreach to attract at-risk students that is equivalent to the averages in Community School District 16. This outreach will include English Language Learners, Students with Disabilities and students that are eligible to receive free and reduced lunch. In order to recruit Students with Disabilities and English Language Learners in Community School District 16, we will facilitate open house sessions that explain the programs that we offer. We will work with the New York City Department of Education's Special Education Reform Committee to help recruit special education students and to close the achievement gap between students with and without disabilities. In order to attract and interest ELL students, all of our advertisement materials will be translated into Spanish and other languages as needed. Since the growing population in Community School District 16 is becoming more diverse - with 15% Hispanic, a Spanish speaking volunteer will be identified to assist in the outreach and recruitment efforts. Dr. Percy Julian School of Science and Mathematics Global Charter School will ensure retention of all at-risk students by working closely with their families to determine and meet the students' needs. Student data will be regularly monitored by data analysis teams and teachers to ensure that students receive all necessary services. The academic rigor and varied educational experiences will be attractive to the families in this community. An open door policy will be established wherein stakeholders, families and staff can communicate, in monthly meetings, the needs of the families that attend our school.

IV. Public Outreach and Community Support

The founding members have met with Community Board 3, Parent Teacher Associations and other key community stakeholders to discuss our proposed school. Elected officials - both city and state, are supportive; they agree that there is great need for quality middle schools in the proposed targeted community. We have also spoken to key leaders and held a community forum at neighborhood block parties to discuss our proposed school. The community is excited about the development of a STEM school that provides opportunities and

resources to acquire and apply knowledge and skills in the footsteps of Dr. Percy Julian. Founding members, community organizations and targeted families believe that a high performing school is the key to this community's school-age children achieving success. With the support of the general public and community, Dr. Percy Julian School of Science and Mathematics Global Charter School will significantly impact future innovative leaders from under-served populations in Science and Mathematics, as well as, contribute to the evolution of STEM education locally and globally.

Signature/Date: ***Nathaniel Haynesworth*** 8/15/12