Manhattanville in West Harlem Implementation Plan Report October 15, 2019 Submission

Declaration Reference and Key Data

Obligation Section Number: 5.07(c)(i)

Obligation Title: Mind Brain Behavior K-12 Education Center

Obligation Page Number: 52

Obligation Trigger: Issuance of TCO for Development Site 2

Obligation Start Date: August 25, 2016

Obligation End Date: 25 Years from Commencement of the Education Center's Full Operation

Obligation Status: In Compliance

Obligation

Mind Brain Behavior K-12 Education Center. CU shall locate within Development Site 2 (the proposed Jerome L. Greene Science Center) to be constructed in Stage 1 a Center to educate the community about diseases that affect the mind and brain as well as the advances being studied by CU's faculty and researchers. The Center shall encourage and design programs for local elementary, junior high school, and high school students. The Center shall commence operation upon issuance of the temporary certificate of occupancy for the Jerome L. Greene Science Center and operate for a 25-year period from commencement of full operation.

* The center opened to the public in February 2017. Therefore, this obligation will be in effect until 2042, 25 years from the commencement of the center's full operation.

Evidence of Compliance

- 1. Press release and/or announcement about center opening
- 2. Link to website
- 3. Annual report
- 4. Signage at Jerome L. Greene Science Center

Columbia University's Implementation Plan and all supporting documentation are made available on the Community Services Webpage at http://manhattanville.columbia.edu/community/benefits-and-amenities.

Manhattanville in West Harlem Implementation Plan Report October 15, 2019 Submission

EOC Checklist for Obligation 5.07(c)(i):
Please check to verify EOC items submitted for review.
1. Press release and/or announcement about center opening
□ 2. Link to website
3. Annual report
4. Signage at Jerome L. Greene Science Center
Monitor's Notes / Comments:
Status: Please check to indicate the status of Obligation 5.07(c)(i):
☐ In Compliance
☐ In Progress
□ Not In Compliance
□ Not Triggered

Public Programs at the Zuckerman Institute

Science and community come together at Columbia's Mortimer B. Zuckerman Mind Brain Behavior Institute

The Zuckerman Institute is delighted to call Manhattanville home and eager to share with our neighbors the challenge and excitement of learning how our minds and brains work. Our Education Lab, located near the 129th Street entrance of the Jerome L. Greene Science Center, is open year round and hosts a variety of hands-on brain science programs. Designed with feedback from the community, these programs harness the groundbreaking research of the institute in creative ways for school children, families, after-school groups, teachers and adults. Contact us to learn more about our programs; we have only just begun!

Community Brain Expo

What does a human brain feel like? Come find out at the Zuckerman Institute's Community Brain Expo. We invite our neighbors to join us for this free public event, held every spring, which features head-scratching demonstrations and mind-boggling activities for every age. Visitors put their minds to the test as they learn about how we see the world around us, how our memories work and other fundamental aspects of the mind and brain. Led by actual scientists, the event is organized by Columbia University Neuroscience Outreach, a group of Columbia graduate students devoted to sharing brain science with the public. The event is held in celebration of Brain Awareness Week.



Public Programs at the Zuckerman Institute





BRAINYAC: Brain Research Apprenticeships in New York at Columbia

Hands-on experience in a laboratory is essential for preparing today's youth to become tomorrow's scientists. With this in mind, the Zuckerman Institute's Brain Research Apprenticeships in New York at Columbia (BRAINYAC) program provides an immersive science research experience in which high school students train and work in neuroscience laboratories at Columbia University. The BRAINYAC program is open to students from select partner programs and schools that serve students in Upper Manhattan and the Bronx. Each student is matched with a Columbia neuroscientist, a mentor who guides the student through a research project. Students come away from the experience with an enhanced understanding of how laboratory research leads to transformative discovery, exposure to a professional academic environment and a stronger connection to science as a career. BRAINYAC receives generous support from the Pinkerton Foundation and the Stavros Niarchos Foundation.

For more information about the public programs at Columbia's Zuckerman Institute, please contact:

Amy Weil Director of Communications amy.weil@columbia.edu 212-851-4393

Anne Holden, PhD Communications Officer anne.holden@columbia.edu 212-853-0171

Brain Insight Lectures and Teacher-Scholar Program

At the Brain Insight Lectures, free and open to the public, eminent Columbia scientists and scholars examine how brain science intersects with everyday life. Speakers have included Olajide Williams, MD, who spoke about how to prevent strokes in communities of color and Frances Champagne, PhD, discussed how our early experiences shape our behavior. Upcoming lecture by Thomas M. Jessell, PhD, will share his groundbreaking work on the neuroscience of movement. These lectures are the scientific cornerstone of our Teacher-Scholar Program, which introduces middle and high school science teachers in New York City to cutting-edge brain science for the duration of the school year. Using the lectures as case studies, the teachers participate in workshops and create a lesson plan each semester that brings neuroscience back to their classrooms. Teachers who complete the program emerge with greater knowledge of neuroscience, a deeper understanding of the scientific process and a toolbox of concrete ways to implement their knowledge in the classroom. These programs are made possible with generous support from the Stavros Niarchos Foundation.

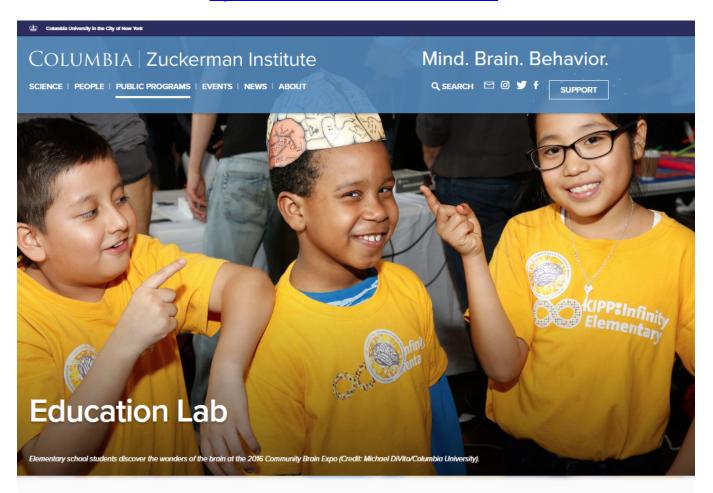




Mind Brain Behavior K-12 Education Center

Link to website:

https://zuckermaninstitute.columbia.edu/education-lab



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Annual Report: Mind Brain Behavior K-12 Education Center

State Submission Reporting Period: October 2018 - September 2019

The ground floor of the Jerome L. Greene Science Center is open to all and is a neighborhood-based resource for brain science education. On February 11, 2017, the Mind Brain Behavior K12 Education center opened, called the Education Lab. Education programs bring together groundbreaking research in creative and exciting ways for school children, families, adults and teachers. Located near the 129th Street entrance to the building, this 1,500 square foot space was designed to resemble the scientific research laboratories of the Zuckerman Institute.

Saturday Science

One of the Institute's programs at the Education Lab is Saturday Science – a themed free event for students, families and community groups held once a month through the school year. Saturday Science activities and demonstrations are engaging and informative, providing launching points for further exploration, reflection and discovery.

There were seven Saturday Science events on the following dates during this reporting period: September 22, October 20, November 17, December 8, February 22, March 9, and April 13. During these events, a total of 1323 people attended; 655 adults and 668 K-12 aged children. An average of 51% of attendees who disclosed their zip codes were residents of program target communities.

Brain Insight Lectures

The Zuckerman Institute's free public lecture series, the Stavros Niarchos Foundation Brain Insight Lectures, examines ways that brain science intersects with everyday life. Each lecture features a Columbia researcher whose approaches to the science of brain and mind resonate with a public audience. The lectures, offered four times a year, are the scientific cornerstone of the Stavros Niarchos Foundation Teacher-Scholar program, a competitive program that introduces high school science teachers in New York City to cutting-edge brain science for the duration of a school year. This series is beyond the requirement of Columbia's commitment.

Public Programming

Between the period of October 2018 through September 2019, the Education Lab has hosted a total of 249 events for a total number of 912 hours of science programming for the public. This includes BRAINYAC (the high school internship program described in the Youth Internships annual report), Saturday Science, the programming of the Brain Insight Teacher-Scholar program, and some additional sessions for middle school students in collaoration with the Double Discovery Cebter. This number also includes activities hosted by our partner program, the independently operated BioBus, Inc.

Program Outreach

Each program has a customized publicity strategy built on targeting communities in upper Manhattan and the South Bronx. For example, the Zuckerman Institute publicizes Saturday Science to reach students, families, teachers and community members in upper Manhattan and the South Bronx. Local schools, libraries and community organizations such as Manhattanville Community Center and YMCA Harlem and are informed of this free, fun-filled event electronically via email and through printed (flyer) materials. The Brain Insight Teacher-Scholar Program is publicized each spring during its application period to schools in the local community and city-wide via emails and posts to specific mailing lists including I Teach NYC, Math for America, STEM Teachers NYC. Flyers are hand-delivered to schools including KIPP Infinity Charter School, PS 036 Margaret Douglas, PS 129 John H Finley, Academy for Social Action, Frederick Douglass Academy II Secondary School, Opportunity Charter School, PS 149 Sojourner Truth, PS 165 Robert E Simon, Wadleigh Secondary School for the Performing Arts, Thurgood Marshall Academy, A. Philip Randolph Campus High School, Harlem Renaissance High School, IS 223 Mott Hall High School, Urban Assembly for the Performing Arts, and Eagle Academy.

Additional Supporting Documentation

- Copies of Saturday Science flyers
- Copy of Brain Insight Teacher-Scholar Program flyer

Organization type	Organization name		
Community	America Scores		
Community	Behind the Book		
Community	BioBus		
Community	Boys & Girls Club of Harlem		
Community	Boys and Girls Club of Harlem		
Community	Broadway Presbeterian Church Nursery School		
Community	Chamber Music Center of New York		
Community	Family Annex		
Community	Figure Skating in Harlem		
Community	Friends of the Children New York		
Community	Get Healthy Harlem		
Community	Graham Community Center		
Community	Harlem Children's Zone		
Community	Harlem Lacrosse		
Community	Harlem Stage		
Community	Harlem YMCA		
Community	HEAF		
Community	Henrietta Lyle of CB 10		
Community	HypotheKids		
Community	Lt JP Kennedy Jr Community Center		
Community	Manhattanville Community Center		
Community	Morningside Area Alliance		
Community	New York City Housing Authority St.Nicholas I Community Center		
Community	NYC Mission Society		
Community	NYPL Countee Cullen Library		
Community	NYPL Harlem Library		
Community	NYPL Schomburg		
Community	P.A.L.A.N.T.E Harlem		
Community	Parenting a Second Time Around (PASTA)		
Community	Project Brownstone		
Community	Special Needs Activity Center for Kids and Adults		
Community	Street Squash		
Community	The Cathedral of St. John The Devine		
Community	The Reading Team		
Community	Urban Advantage		
Community	Wendy Hilliard Foundation		
Community	Westside Campaign Against Hunger		
School	Bloomingdale School of Music		
School	Columbia Secondary School		
School	Democracy Preparatory Charter School		
School	Frederick Douglass Academy II Secondary School		
School	Future Leaders Institute Charter School		

School	Harlem Academy			
School	Harlem Link Charter			
School	IS 286 Renaissance Leadership Academy			
School	KIPP Infinity Charter School			
School	KIPP Star Middle School			
School	Knowledge and Power Prep Academy IV			
School	MS 54 Booker T. Washington Middle School			
School	Opportunity Charter School			
School	PS 036 Margaret Douglas			
School	PS 076 A Philip Randolph			
School	PS 123 Mahalia Jackson			
School	PS 129 John H Finley			
School	PS 149 Sojourner Truth			
School	PS 161 Pedro Albizu Campos			
School	PS 161 Perdo Albizu Campos			
School	PS 165 Robert E Simon			
School	PS 180 Hugo Newman			
School	PS 250 Westside Collaborative			
School	Purple Circle Early Childhood Program			
School	The O'Gorman Garden Harlem			
School	Thurgood Marshall Academy			
School	Wadleigh Secondary School for the Performing Arts			
Teacher network	I Teach NYC			
Teacher network	Math for America			
Teacher network	STEM Teachers NYC			
Columbia University Outreach	Brain Expo attendees			
Columbia University Outreach	BRAINYAC mailing list			
Columbia University Outreach	Columbia Neuroscience Society			
Columbia University Outreach	Columbia Neuroscience Society			
Columbia University Outreach	Columbia University Neuroscience Outreach			
Columbia University Outreach	Late Night Science			
Columbia University Outreach	Office of Government and Community Affairs			

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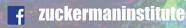
MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE

Public Programs





o zuckermanbrain



programs@zi.columbia.edu

Saturday Science

9/22 Hello Brain

10/20 Come to Your Senses

11/17 Decisions, Decisions!

12/8 Let's Move It

For kids of all ages

Jerome L. Greene Science Center Education Lab 3227 Broadway, New York

Stavros Niarchos Foundation Brain Insight Lectures

9/26 Understanding Alzheimer's Disease Through Its Anatomical Vulnerability | Dr. Scott Small

Getting a Head Start: The Developing Brain and the Importance of Early Experiences | Dr. Nim Tottenham

For high school students and adults

Joseph D. Jamail Lecture Hall Columbia University Graduate School of Journalism 2950 Broadway, New York

With support from:



11/15











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MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE

SATURDAY SCIENCE

Free events to explore the mind, brain and behavior

A monthly event for families and community groups to explore the workings of the brain through hands-on activities and unique scientific resources. For kids of all ages!

Spring 2019 Calendar

Saturday, February 9, 2019	1-4PM	My Growing Brain
Saturday, March 9, 2019	1-4PM	Healthy Brain, Happy Brain
Saturday, April 13, 2019	1-4PM	Mad Science
Saturday, May 18, 2019	1-4PM	Super Saturday STEM Expo (visit supersaturdaystemexpo.org for more information)

All dates and times are subject to change. Please visit our website: zuckermaninstitute@columbia.edu to register and sign up for updates Follow us at:





Columbia University's Zuckerman Institute, 609 West 129th Street, Education Lab (ground floor)





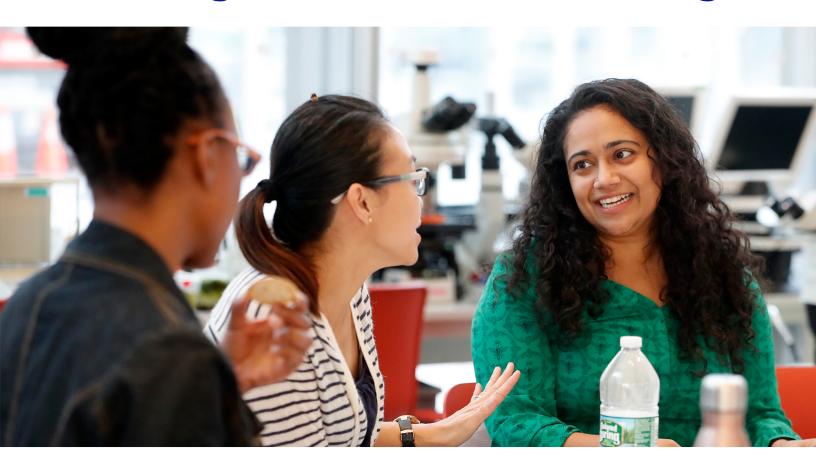






Apply now for the

Brain Insight Teacher-Scholar Program



Are you a high school teacher in New York City?

Do you teach science or math, or have an interest in brain science? If so, this fellowship is for you. Based at Columbia University's Zuckerman Institute, the Teacher-Scholar Program offers an opportunity to learn about cutting-edge neuroscience research and be part of a team creating educational materials to bring neuroscience to the classroom.

This is a paid, 1-year fellowship at Columbia University.

For more information and to apply:

https://zuckermaninstitute.columbia.edu/teacher-scholar-program

programs@zi.columbia.edu

Application deadline May 21, 2019



