#### Manhattanville in West Harlem Implementation Plan Report October 15, 2018 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, 2018 Submission

EOC Checklist for Obligation 5.07(c)(i):
Please check to verify EOC items submitted for review.
<ul> <li>1. Press release and/or announcement about center opening</li> <li>2. Link to website</li> <li>3. Annual report</li> </ul>
4. Signage at Jerome L. Greene Science Center
<u>Monitor's Notes / Comments</u> :
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

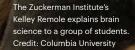
### Science and community come together at Columbia's Mortimer B. Zuckerman Mind Brain Behavior Institute

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.

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#### 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.

#### 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.

#### 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 🕼 Columbia University in the City of New York

#### **Mind Brain Behavior K-12 Education Center**

#### Link to website:

https://zuckermaninstitute.columbia.edu/our-public-programs

### COLUMBIA | Zuckerman Institute

SCIENCE | PEOPLE | PUBLIC PROGRAMS | EVENTS | NEWS | ABOUT

Mind. Brain. Behavior.

# **Our Public Programs**

Science and community come together at Columbia's Zuckerman Institute. We are delighted to call Manhattanville home and eager to share with our neighbors the challenge and excitement of learning how our minds and brains work.

Students learn about the wonders of the brain at the 2016 Community Brain Expo (Credit: Michael DeVito).

#### DISCOVER SCIENCE WITH US

Our Education Lab is open year-round and hosts a variety of hands-on brain science programs in the Jerome L. Greene Science Center, located at 609 W 129th St. 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

#### Annual Report: Mind Brain Behavior K-12 Education Center

#### State Submission Reporting Period: October 2017 - September 2018

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 program 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.

Saturday Science events were successfully implemented on the following dates during this reporting period: October 14, November 18, December 9, February 10, March 10, April 21, September 22. During these events, a total of 770 people attended. Approximately 340 people in attendance were adults and 349 were K-12 aged children. Similarly, an average of 53.53% 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 2017 through September 2018, the Education Lab has hosted a total of 169 events for a total number of 734 hours of science programming for the public. This includes BRAINYAC (the high school internship program described in the Youth Internships annual report), Saturday Science, and the programming of the Brain Insight Teacher-Scholar program. In addition, this number includes activities hosted by a 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 via emails and printed flyers targeted to schools in the local community as well as city-wide. 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

# SATURDAY SCIENCE

An interactive journey to explore the mind, brain, and behavior

#### THIS MONTH'S THEME

# Sensory Overload

# October 14, 2017 1:00–4:00 p.m.

Greene Science Center 609 West 129th Street New York

Columbia's Zuckerman Institute invites learners of all ages to explore the workings of the brain through handson activities and authentic scientific resources. Free, monthly event, open to the public. RSVP recommended.

For more information and to RSVP: https://zuckermaninstitute.columbia.edu/sat-sci

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MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE



An interactive journey to explore the mind, brain, and behavior

THIS MONTH'S THEME

# Ready, Set, Go!

November 18, 2017 1:00–4:00 p.m.

Greene Science Center 609 West 129th Street New York

Columbia's Zuckerman Institute invites learners of all ages to explore the workings of the brain through handson activities and authentic scientific resources. Free, monthly event, open to the public. RSVP recommended.

For more information and to RSVP: https://zuckermaninstitute.columbia.edu/sat-sci

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An interactive journey to explore the mind, brain, and behavior

#### THIS MONTH'S THEME

# Make a Memory!

# December 9, 2017 1:00–4:00 p.m.

Greene Science Center 609 West 129th Street New York

Columbia's Zuckerman Institute invites learners of all ages to explore the workings of the brain through handson activities and authentic scientific resources. Free, monthly event, open to the public. RSVP recommended.

For more information and to RSVP: https://zuckermaninstitute.columbia.edu/sat-sci

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# SATURDAY SCIENCE

An interactive journey to explore the mind, brain, and behavior

Nov. 18: Ready, Set, Go Dec. 9: Make a Memory Feb. 10: From Disease to Discovery Mar. 10: Your Changing Brain Apr. 21: Trick Your Brain

## 1:00-4:00 p.m.

Greene Science Center 609 West 129th Street New York

Columbia's Zuckerman Institute invites learners of all ages to explore the workings of the brain through handson activities and authentic scientific resources. Free, monthly event, open to the public. RSVP recommended.

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# COLUMBIA | Zuckerman Institute

MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE





Columbia University's Mortimer B. Zuckerman Mind Brain Behavior presents the Stavros Niarchos Foundation Brain Insight Teacher-Scholar Program

# APPLICATION DEADLINE May 25, 2018

For more information and to apply

tinyurl.com/TeacherScholar2018

publicprograms@ zi.columbia.edu

(212) 853-0600

Columbia University's Teacher-Scholar program from the Zuckerman Institute introduces high school teachers from New York City to the latest advancements in brain science. The program combines public lectures with teacher-only seminars to enhance content knowledge while augmenting teaching skills.

In the one-year program, teachers gain a greater knowledge of neuroscience, enhanced scientific literacy, and concrete ways to implement their knowledge in the classroom.

Teachers receive a stipend for their participation.

### COLUMBIA | Zuckerman Institute

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