

**Manhattanville in West Harlem Implementation Plan Report
October 15, 2020 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 Columbia Neighbors Webpage at <https://neighbors.columbia.edu/content/community-commitments>.

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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:

[illegible]

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.



The Zuckerman Institute's
Kelley Remole explains brain
science to a group of students.
Credit: Columbia University



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

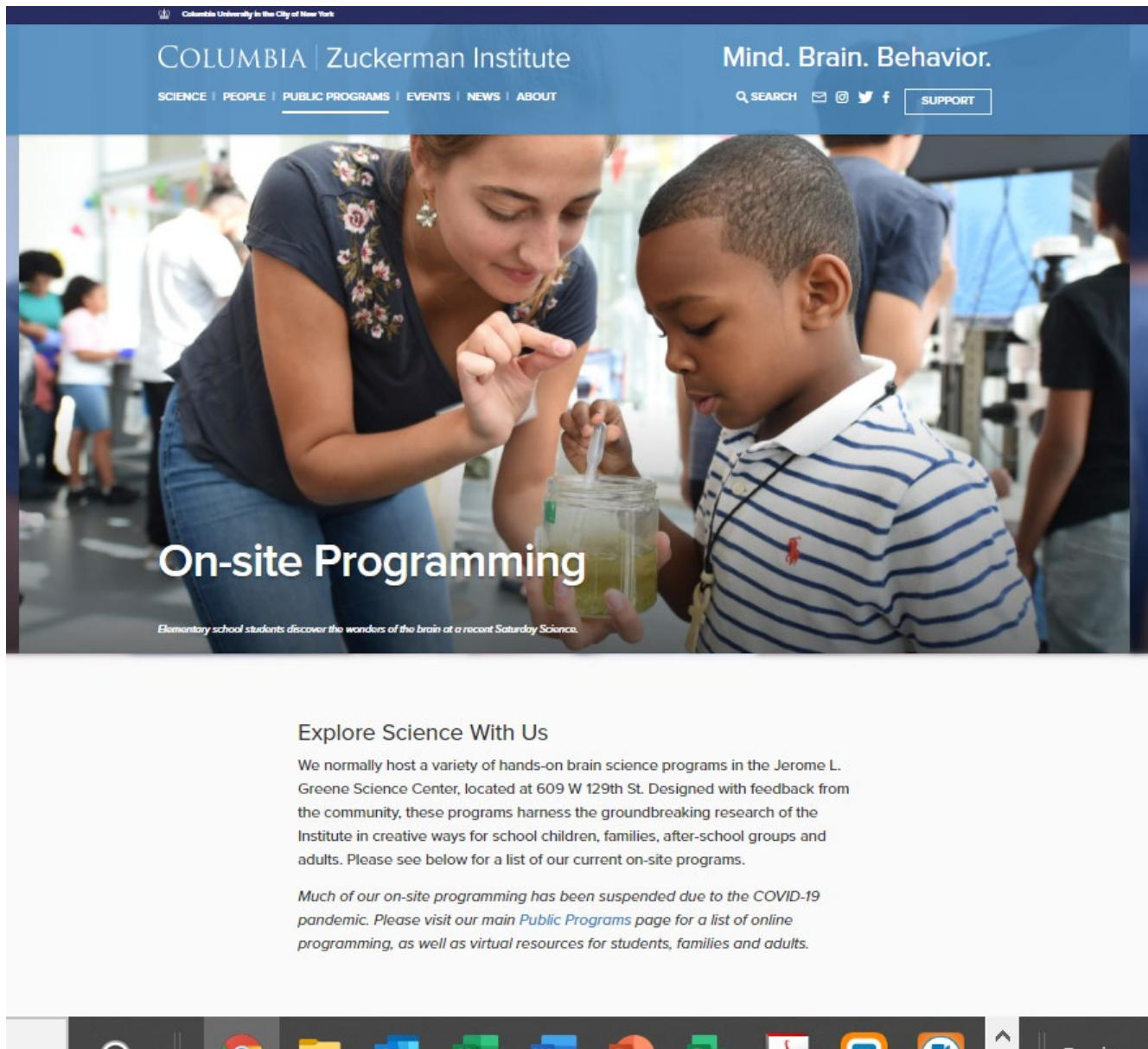
Brain Insight Lectures and Teacher-Scholar Program

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>



Annual Report: Mind Brain Behavior K-12 Education Center

State Submission Reporting Period: **October 2019 - September 2020**

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 five Saturday Science events on the following dates during this reporting period: September 28, October 26, November 16, December 7, February 8. During these events, a total of 993 people attended; 506 adults and 487 K-12 aged children. An average of 45% of attendees who disclosed their zip codes were residents of program target communities. Two additional events, planned for March 14, and April 14, had to be cancelled due to the COVID-19 pandemic.

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. This year three events were held (a fourth was scheduled but cancelled due to the pandemic and replaced with two guest speaker sessions for the Teacher-Scholars).

Public Programming

Between the period of October 2019 through early March 2020, prior to the shutdown, the Education Lab hosted a total of 115 events for a total number of 375 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, sessions for middle school students in collaboration with the Double Discovery Center and sessions organized by student groups. This number also includes activities hosted by our partner program, the independently operated BioBus, Inc.

Between the period of early March and September 2020, the Zuckerman Institute hosted a total of 159 virtual events for a total number of 1157 hours of science programming for the public. These included virtual replacements for the BRAINYAC and Teacher-Scholar sessions, as well as collaborative community events with partners such as the National Jazz Museum in Harlem and BioBus virtual events and internships.

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 flyers.

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



SATURDAY SCIENCE

Fall 2019

COLUMBIA | Zuckerman Institute

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!

Fall 2019 Calendar

Saturday, September 28, 2019	1-4PM	My Amazing Brain
Saturday, October 26, 2019	1-4PM	Making Sense
Saturday, November 16, 2019	1-4PM	Do You Remember?
Saturday, December 7, 2019	1-4PM	Making Choices

*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:*

 @zuckermanbrain

 zuckermaninstitute

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



BIOBUS



SATURDAY SCIENCE

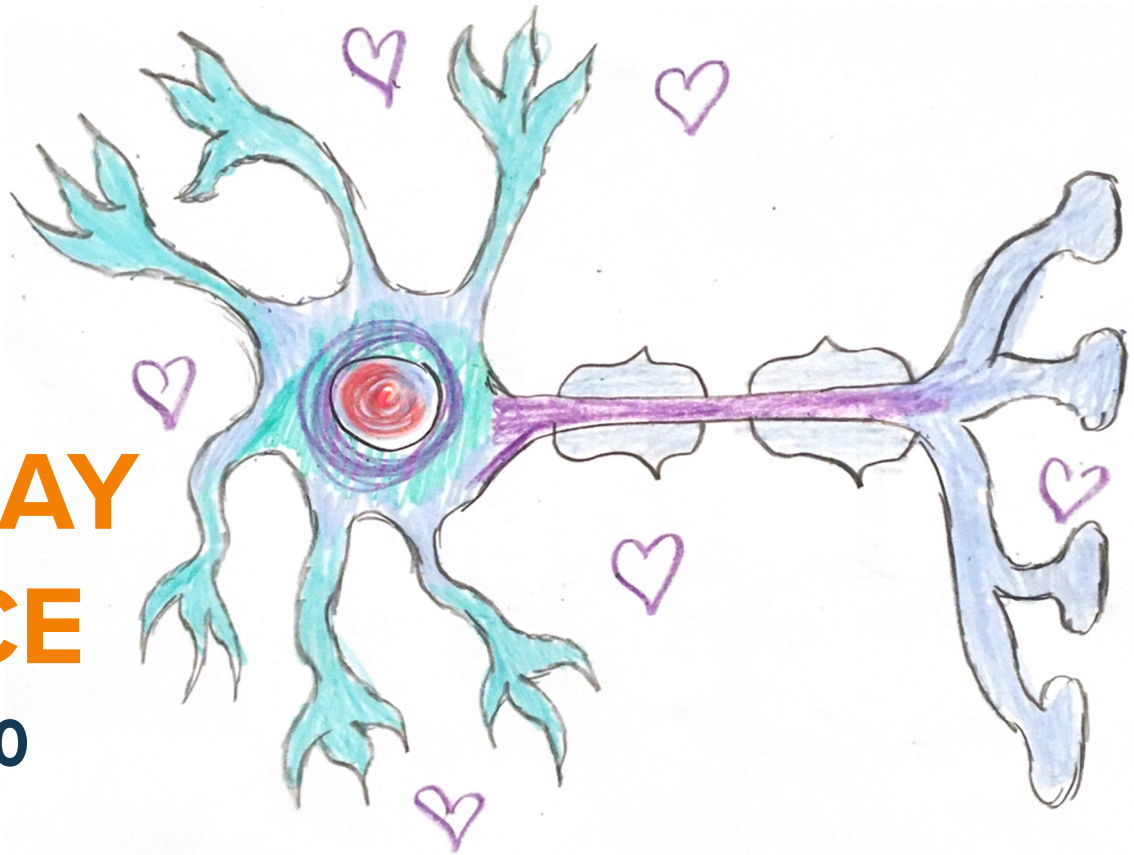
Spring 2020



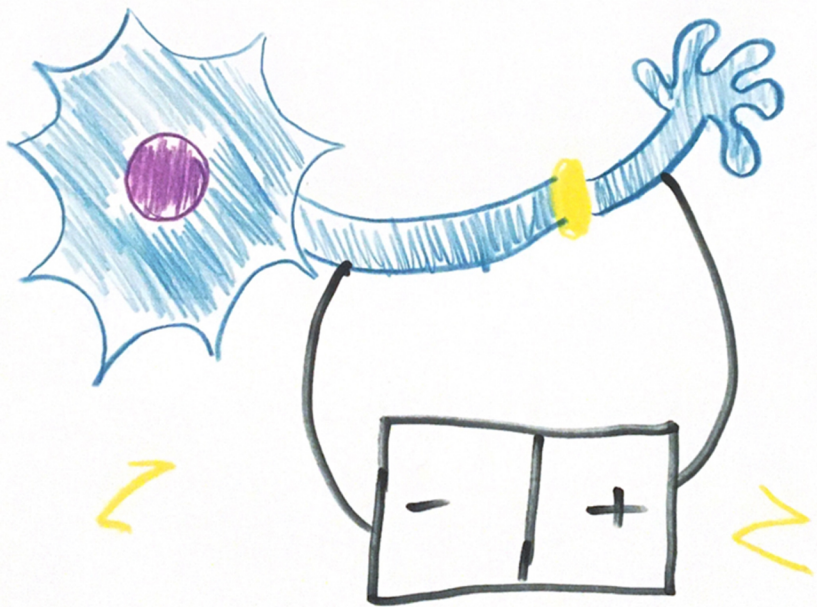
Artwork by Emily, Age 11.5

SATURDAY SCIENCE

Spring 2020



Artwork by Skyler, Age 16



It's electric!

SATURDAY SCIENCE

Spring 2020

Artwork by Angel, Age 11

COLUMBIA | Zuckerman Institute

MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE

SATURDAY SCIENCE

Free events to explore the mind, brain and behavior

Held monthly 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 2020 Calendar

Saturday, February 8, 2020	1-4PM	Have a Heart
Saturday, March 14, 2020	1-4PM	Tools of the Trade
Saturday, April 14, 2020	1-4PM	Let's Move

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:

 @zuckermanbrain  zuckermaninstitute

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



BIOBUS



Apply now for the Zuckerman Institute's **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 26, 2020





**GREENE SCIENCE CENTER
ZUCKERMAN INSTITUTE**

JEROME L
GREENE SCIENCE
CENTER



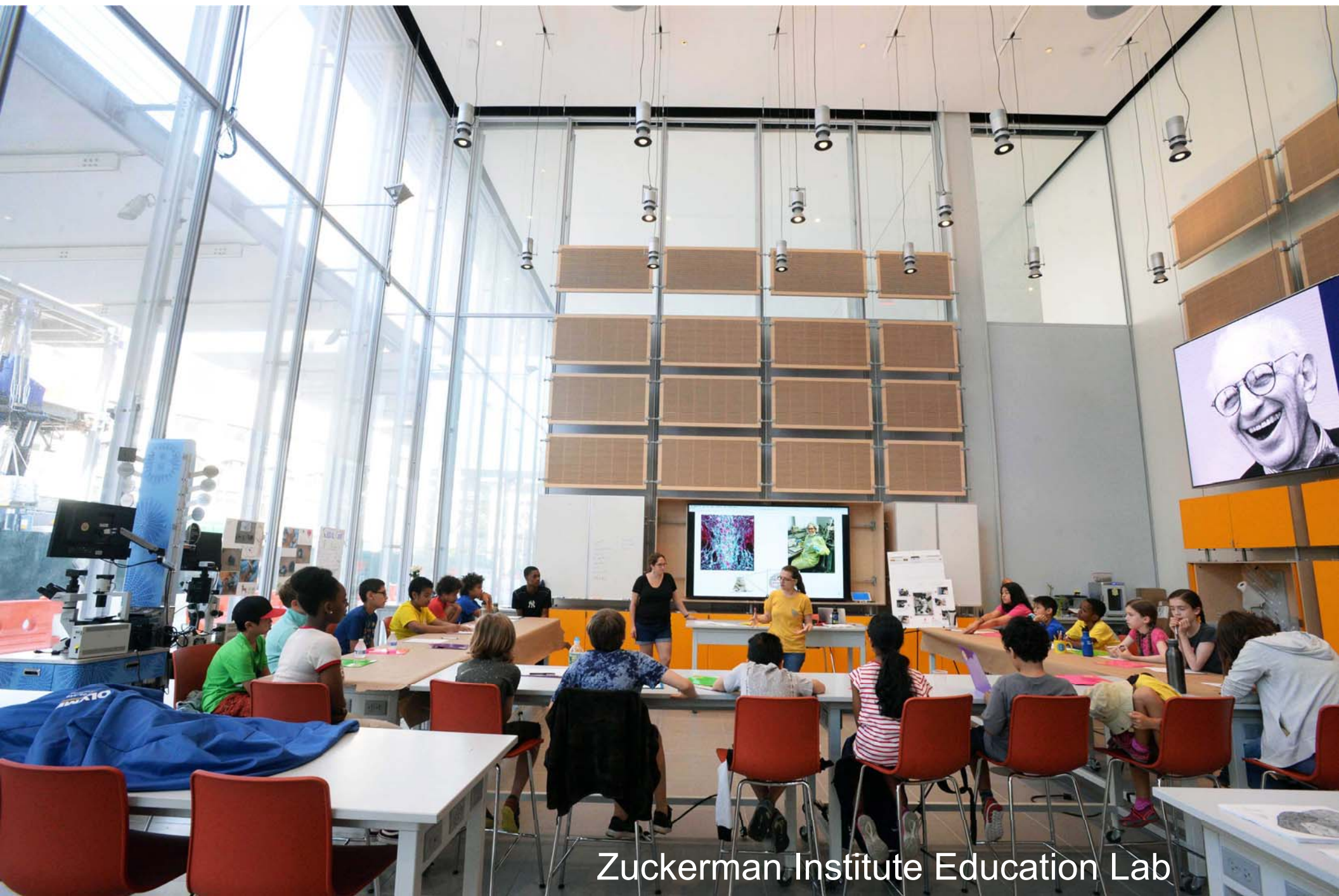
COLUMBIA UNIVERSITY

JLG Lobby

**EDUCATION
LABORATORY**

609 W 129

**EDUCATION
LABORATORY**



Zuckerman Institute Education Lab