

Manhattanville in West Harlem Implementation Plan Report
October 15, 2020 Submission

Declaration Reference and Key Data

Obligation Section Number: **5.07(c)(xi)**

Obligation Title: **Youth Internships**

Obligation Page Number: **55**

Obligation Trigger: **2010**

Obligation Start Date: **Summer 2010**

Obligation End Date: **2025**

Obligation Status: **In Compliance**

Obligation

Following the summer 2014 internship program, CU met with the principal of the school and developed the modifications described below. Empire State Development and Columbia University agreed to this modification on November 28, 2018.

Modified Language:

Following the initial five years and in coordination with the School's leadership, CU has modified the internship program to focus on at least one aspect of Science, Technology, Engineering, Environment, Arts and/or Math (STEAM) and basic office etiquette. Working with various units within the University, the modified internship program will include the following adaptations:

New Title: Youth Internships

Timeframe: No longer limited to summer weeks.

Program Duration: Varies. Internships can range from 4 weeks to 9 months depending upon the specific program.

Number of Interns: No fewer than 15 internships comprised of CSS students and/or local community students.

Internship Locations: Within Columbia University offices and laboratories

Program Description: CU shall provide no fewer than 15 high school students attending the Columbia Secondary School for Math, Science and Engineering and/or living within the Local Area an opportunity to participate in one of several youth internship programs operated by Columbia University focusing on math, science, engineering and/or the environment/sustainability. Internship programs vary and are managed by departments, schools and other offices within the University. The internships will be located on the University's campuses.

The Internship Program will be reviewed in consultation with ESD with the intent of modifying and/or renewing the program in 2021.

Evidence of Compliance

1. Annual report

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>.

Manhattanville in West Harlem Implementation Plan Report

October 15, 2020 Submission

EOC Checklist for Obligation 5.07(c)(xi):

Please check to verify EOC items submitted for review.

- ☐ 1. Annual report

Monitor's Notes / Comments:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.

Status:

Please check to indicate the status of Obligation 5.07(c)(xi):

- ☐ In Compliance
- ☐ In Progress
- ☐ Not In Compliance
- ☐ Not Triggered

Annual Report: Youth Internships

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

Columbia University offers a variety of internship programs that help local youth gain valuable work experience:

Brain Research Apprenticeships in New York at Columbia (BRAINYAC) is a program that pairs high school students with scientists for intensive lab apprenticeships. This Zuckerman Institute program is an immersive science research experience in which Zuckerman Institute scientists open their doors to high school students, who in turn bring their talents and perspectives to the lab. Started in 2013, BRAINYAC pairs students with scientists who mentor them throughout seven weeks of intensive summer research. The program prepares students for laboratory research through training sessions, which run from January through May, followed by the seven-week period of intensive research during the summer. Upon completing the program, students come away with an increased understanding of how research in the lab leads to transformative discoveries. Eligible sophomores and juniors are drawn from select youth-serving programs: the Lang Youth Medical Program at New York-Presbyterian Hospital; the State Pre-college Enrichment Program run by Columbia University Medical Center; the Double Discovery Center; BioBus, Inc; and the Columbia Secondary School for Math, Science and Engineering (CSS). BRAINYAC receives generous support from the Pinkerton Foundation and the Stavros Niarchos Foundation.

The Columbia University Facilities and Operations (CUFO) High School Summer Internship Program is a structured, six-week initiative that provides students with practical work experience before graduation. The program was started in 2011 and is run by the Columbia University Department of Facilities and Operations for high schoolers that live in the 17 local zip code area. Local refers to those students whose primary residence is located within one of the following 17 zip codes: 10025, 10026, 10027, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10037, 10039, 10040, 10455, 10451, 10454, 10474.

Engineering the Next Generation (ENG) is a program for high school students interested in engineering.

ENG is an opportunity for motivated high school students from local partner schools to participate in a six-week intensive research program that includes both lab work and supplemental programming to develop their academic and professional skills. Students gain practical research experience, exposure to lab culture, new skills and multi-level mentorship. Program components include working with Engineering faculty, hands-on research skills and experience, master class, poster symposium presentation, college letter of recommendation, and the possibilities of ongoing research and publication in the Columbia Undergraduate Science Journal.

Please refer to each program's annual report for more information on modifications that occurred due to COVID-19.

Internship Program	Total	# of Local Students	# of CSS Students
BRAINYAC	16	9	7
CUFO	7	7	0
ENG	7	3	5
TOTAL:	30	19	12

Contents of Report

- BRAINYAC Annual Report
- BRAINYAC Brochure
- BRAINYAC Information Session Invitation
- BRAINYAC 2020 Application Packet
- BRAINYAC 2020 Poster Presentation Program
- Columbia University Facilities and Operations (CUFO) Summer Internship Annual Report
- Columbia University Facilities and Operations (CUFO) Summer Internship 2020 Questionnaire
- Columbia University Facilities and Operations (CUFO) Summer Internship 2020 Weekly Schedule
- Engineering the Next Generation (ENG) Annual Report
- Engineering the Next Generation (ENG) 2020 Application Packet
- Engineering the Next Generation (ENG) Virtual Program Model Details

Annual Report: Youth Internships - BRAINYAC

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

- Information Session Date: October 9, 2019

Following the initial five year Summer Internship Program and in coordination with Columbia Secondary School's leadership, CU modified the internship program to provide a more selective internship to focus on at least one aspect of Science, Technology, Engineering, Environment, Arts and/or Math (STEAM).

The BRAINYAC program (Brain Research Apprenticeships In New York At Columbia) admits students with a stated interest in biomedical and specifically neuroscience research and provides immersive science research experience with Zuckerman Institute scientists. The program prepares students for laboratory research through training sessions, which run from January through May, followed by a 7-week period of intensive research during the summer. Upon completing the program, students come away with an increased understanding of how research in the lab leads to transformative discoveries. The program admits from five partner programs; Lang Youth Medical Program, State Pre-College Enrichment Program (S-PREP), Columbia Secondary School, the Double Discovery Center and BioBus, Inc. Participants must be at least 16 years of age in order to participate and are granted a stipend for their time in the program.

In early March, after only 5 BRAINYAC training sessions, New York City went into lockdown and all non-essential on-site activities were suspended due to COVID-19. The BRAINYAC team worked to sustain and strengthen the program by working together to creatively find resources to adapt to the shift from in-person hands-on activities to a virtual learning environment. Virtual training sessions were held both synchronously and asynchronously using Zoom and Google Classroom, the curriculum was shifted to explore topics including research expertise, data analysis, computation, and image processing, and guest speakers were scheduled. Students were given the option to participate in a virtual laboratory project over the 7 weeks of the summer, or to defer until summer 2021. One student opted to defer, indicating the high need for us to continue providing programming despite the virtual format. 15 of the 16 students chose a virtual project, and our mentors adapted to provide opportunities to participate in research without coming onsite.

	Intern Name	Zip Code	High School
1.		10033	NYC Museum School
2.		10029	Columbia Secondary School for Math, Science, and Engineering
3.		11746	Half Hollow Hills High School West
4.		10027	Columbia Secondary School for Math, Science, and Engineering
5.		11377	Bard High School Early College Queens
6.		10030	Columbia Secondary School for Math, Science, and Engineering
7.		10029	Columbia Secondary School for Math, Science, and Engineering
8.		10031	Kipp NYC College Prep
9.		10453	Aquinas High School
10.		10025	Columbia Secondary School for Math, Science, and Engineering
11.		10040	Fiorello H. LaGuardia High School of Music & Art and Performing Arts
12.		10473	Birch Wathen Lenox
13.		10030	Columbia Secondary School for Math, Science, and Engineering
14.		11746	Half Hollow Hills High School West
15.		10603	Ethical Culture Fieldston School
16.		11104	Columbia Secondary School for Math, Science, and Engineering

Additional Supporting Documentation

- BRAINYAC Brochure
- BRAINYAC Information Session Invitation
- BRAINYAC 2020 Application Packet
- BRAINYAC 2020 Poster Presentation Program

The Zuckerman Institute's BRAINYAC program is an immersive science research experience at Columbia University for high school students.

BRAINYAC combines training in neuroscience with mentored laboratory research.

Learn to make images like this.

Image produced by Siegelbaum Lab/Columbia's Zuckerman Institute.

Do you want to be a BRAINYAC?

You could be a BRAINYAC if you are:

- ✓ Genuinely interested in the biomedical sciences
- ✓ Ready to work in a sophisticated, high-tech lab environment
- ✓ Willing to commit to the entire program from January - August
- ✓ Enrolled in one of BRAINYAC's partner programs

VISIT US ONLINE

🌐 zuckermaninstitute.columbia.edu/brainyac

🐦 @zuckermanbrain

📘 zuckermaninstitute

BRAINYAC

Jerome L. Greene Science Center
3227 Broadway
New York
NY 10027

☎ 212-853-0600

✉ programs@columbia.edu

FUNDED BY

The Pinkerton Foundation

ΙΣΝ / SNF ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
STAVROS NIARCHOS FOUNDATION

BRAINYAC

Brain Research Apprenticeships
in New York at Columbia



COLUMBIA | Zuckerman Institute

Eligibility

To apply, you must be:

- ✓ A sophomore or junior in high school
- ✓ 16 years of age or older by the start of the summer session
- ✓ Able to commit to the entire program from January through August
- ✓ Enrolled in one of our partner programs

OUR PARTNER PROGRAMS

- Columbia Secondary School of Math, Science & Engineering
- Double Discovery Center at Columbia College
- Lang Youth Medical Program
- State Pre-College Enrichment Program (S-PREP)
- BioBus, Inc.

What's involved

During the program you will be involved with:

- ✓ Saturday morning training sessions, twice per month, from January - May to build your science knowledge and technical skills
- ✓ A full-time laboratory internship, mentored by a Columbia University neuroscientist, from June - August
- ✓ Weekly advisory sessions through the summer to enhance your presentation skills
- ✓ A stipend that is paid in two installments
- ✓ At the end of the program you will present your research to your friends, family and mentors as well as researchers and the Columbia community

Outcomes

At the end of the program, you will:

- ✓ Have an advanced understanding of how lab research can lead to transformative discoveries
- ✓ Be familiar with a professional and academic environment
- ✓ Have a greater connection to science as a career

ALUMNI OPPORTUNITIES

After you graduate from the program, you can:

- Apply to be a Merit Fellow and get paid to continue working in your lab over the academic year or following summer
- Apply to work as a paid intern for the following year's BRAINYAC program
- Return for alumni events
- Be part of the Zuckerman Institute community



“

“My favorite part was learning information that became my base knowledge for the summer. I enjoyed being in an environment where questions were encouraged and I learned things I didn't know.”

BRAINYAC student
class of 2019



“

“I conducted my own experiment with a full understanding of my mentor's project and why even my participation was important.”

BRAINYAC student
class of 2019




“

“This program has impacted my life by giving me confidence to believe in myself and trust that I am capable of handling any experience.”

BRAINYAC student
class of 2017

This event has ended.



OCT 09

BRAINYAC Open House and Information Session

by Columbia University's Zuckerman Institute

Following

Free

♡

Sales Ended

Details

Sales Ended



Date And Time

Wed, October 9, 2019

4:30 PM – 6:00 PM EDT

[Add to Calendar](#)



Location

Jerome L. Greene Science Center

Education Lab, 1st Floor

3227 Broadway

New York, NY 10027

[View Map](#)



Come and find out more about the Zuckerman Institute's Brain Research Apprenticeships in New York at Columbia (BRAINYAC) program!

About this Event

The Zuckerman Institute's BRAINYAC program provides an immersive summer research experience in which high school students train and work in neuroscience laboratories at Columbia University. Come and find out more about what we offer and how to apply - and bring all your questions!

Date And Time

Wed, October 9, 2019

4:30 PM – 6:00 PM EDT

[Add to Calendar](#)

Location

Jerome L. Greene Science Center

Education Lab, 1st Floor

3227 Broadway

New York, NY 10027

[View Map](#)



Columbia University's Zuckerman Institute

Organizer of BRAINYAC Open House and Information Session

The **Zuckerman Institute** brings together an extraordinary group of scientists in a state-of-the-art facility to transform our understanding of the brain and mind. *You have a mind to discover. Join us!*

[Following](#)[Contact](#)

BRAINYAC Open House and Information Session

at

Jerome L. Greene Science Center

Education Lab, 1st Floor 3227 Broadway, New York, NY 10027



COLUMBIA | Zuckerman Institute

MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE

BRAINYAC Program Contractual Agreement

I, _____, agree as a student accepted to Mortimer B. Zuckerman Mind Brain Behavior Institute's Brain Research Apprenticeships in New York at Columbia (BRAINYAC) Program agree to fully participate in the program.

The agreement sets the terms for acceptance into the program.

The student agrees to:

- Abide by BRAINYAC Program Guidelines.
- Attend the mandatory training sessions and field trips associated with the program.
- Fulfill the requirements of the assigned internships.
- Understand that BRAINYAC is part of a larger consortium of science research mentoring programs.
- Participate and assume alumni roles where possible.

The parent/guardian agrees to:

- Support the commitment of the student to the program.
- Support the program's goals and objectives.
- Support BRAINYAC staff in all matters relating to the Program Guidelines

BRAINYAC staff agree to:

- Clearly communicate expectations of the program to the student and parent/guardian.
- Maintain accurate records of the student's performance.
- Maintain availability for interaction, contact, and support for the student

Student Signature: _____ Date: _____

Parent/Guardian Signature: _____ Date: _____

BRAINYAC Staff Signature: _____ Date: _____

COLUMBIA | Zuckerman Institute

MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE

Parent/Guardian Information and Agreement

Child's Name

Last	First	Middle Initial
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Parent/Guardian Name

Last	First	Middle Initial
------	-------	----------------

Parent/Guardian Address

Street		
--------	--	--

City	State	Zip Code
------	-------	----------

Parent/Guardian Contact Information

Home Phone	Work Phone
------------	------------

Cell Phone	Email
------------	-------

Emergency Information

Emergency Contact Name	Relationship	Phone
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Child's Doctor	Phone
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I agree to allow my child to participate in Mortimer B. Zuckerman Mind Brain Behavior Institute's (ZMBBI's) BRAINYAC program. The program will meet at least three (3) times a month January to June for training sessions and Mondays through Fridays July through August for a research internship mentored by a neuroscientist. I also agree to allow my child to participate in the other components of the program: workshops, field trips, and alumni roles.

My child will be responsible for their own transportation to and from the program venues. ZMBBI will not be held responsible for any liabilities, losses, or injuries incurred during transportation. ZMBBI will be photographing the student's activities during the course of the program. By signing this letter, I relinquish all rights to photography taken on the premises and outside the premises for purposes of publicizing ZMBBI.

In case of accident and in the event that I cannot be located, I give permission to the Mortimer B. Zuckerman Institute to take my child named above to the hospital and given emergency treatment.

Parent/Guardian Signature	Date
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COLUMBIA | Zuckerman Institute

MORTIMER B. ZUCKERMAN MIND BRAIN BEHAVIOR INSTITUTE

Columbia University Photo Release Agreement

The undersigned hereby grants permission to the Trustees of Columbia University in the City of New York ("Columbia") and to Columbia's affiliates or others acting with authority from Columbia, with respect to all photographs, including, but not limited to: still photographs, video tapes, film, digital files, etc. ("Photographs") taken of the undersigned by or on behalf of Columbia. To use, edit and publish, and reuse and republish the Photograph(s) in whole or in part, individually or in conjunction with other Photographs, in any medium, whether now existing or later created, for any purpose, including but not limited to the intended usage set forth above, that Columbia and those acting pursuant to its authority deem appropriate.

This agreement and release shall be binding on me, my heirs, executors and assigns.

Name

Address

Phone

Signature

Parent/Guardian Signature (if undersigned is under 18 years old)

Date

AMERICAN MUSEUM OF NATURAL HISTORY

PERMISSION AND RELEASE

Your child is a participant in the Science Research Mentoring Program (the "Program") at the American Museum of Natural History, and is taking courses at Columbia University as part of the Program. The Museum and Columbia will be filming and/or photographing the students in the Program in order to create a short video and other materials to help others learn about the Program. We would like your permission to film and/or photograph your child for these purposes. Please sign below and return this form to Christine Calderón at the Museum at cbanks@amnh.org. You can also call her with any questions at 212-496-3521.

I _____ (parent/guardian's name) hereby grant the American Museum of Natural History (the "Museum") and the Trustees of Columbia University in the City of New York ("Columbia"), and each of their respective licensees, assigns, invitees, and others acting with authority from the Museum and/or Columbia, the absolute and irrevocable right and permission to take videos, sound recordings, and/or photographs (collectively "Recordings") of my child (insert name)_____.

I acknowledge the Museum will own the copyright to the Recordings, and agree not to make any claim to or challenge the rights of the Museum in the Recordings. In addition, the Museum and Columbia reserve the right to use, edit, alter, publish, broadcast and sublicense the Recordings for any educational or promotional purpose whatsoever, including but not limited to use on their web sites and social media sites, and those of the Science Research Mentoring Consortium, and in all forms of media, worldwide in perpetuity, without further notice or compensation, and, if I have given them permission to do so below, to use my child's name in connection therewith.

I, for and on behalf of my child, hereby release and discharge the Museum, Columbia, and each of their licensees, assigns, invitees, and others acting with authority from the Museum and/or Columbia from any and all claims and demands arising out of or in connection with the use of the Recordings, whether by the Museum, Columbia, or another party, including without limitation any and all claims for libel or invasion of privacy.

This Permission and Release is a legally binding agreement and will be construed broadly to provide a release and waiver to the maximum extent permissible under applicable law. Any provisions found to be void or unenforceable shall be modified to the minimum extent necessary to make them enforceable, or if such modification is not possible, then severed from this agreement, and shall not affect the validity or enforceability of any other provisions.

This Permission and Release shall be governed by the laws of New York and the United States of America. I hereby submit to the exclusive jurisdiction of the courts of New York and waive any objection to venue with respect to actions.

I have read, fully understand, and agree to the foregoing.

Print Child's Name:

Parent or Guardian signature:

Print Parent or Guardian name:

Date:

Additionally, I _____ (parent/guardian's name) hereby grant the American Museum of Natural History and the Trustees of Columbia University in the City of New York, and their respective licensees, affiliates, assigns and others acting with their authority, the absolute and irrevocable right and permission to use my child's name in connection with the Recordings.

Parent or Guardian signature

Date

NYC Science Research Mentoring Consortium

Welcome Packet and Forms

Dear student,

As a participant in the BRAINYAC program, you may not realize that you are part of a bigger community of high school science researchers. BRAINYAC is a member of the NYC Science Research Mentoring Consortium, and all the students in these programs - more than 300 a year at 20 sites around the city! - do exactly what you are doing: taking classes to prepare for your research experience, and working with a mentor on an authentic research project. The programs in the Consortium are excited to help you build your network and continue learning as you dive into science research. There are student events that will be happening throughout the year, including opportunities to meet and present your research to other high school students. We've included a calendar with the bigger events, but more may pop up during the school year, so be sure to read the emails from your program's staff, even after your research experience is over!

You are also part of another community - the Pinkerton Science Scholars. There is another letter included with this packet that explains more, but know this: Pinkerton Science Scholar is something you can list on your college applications and resume. You are part of a select group of students chosen for a particular type of research opportunity, and the Pinkerton Foundation has been instrumental in supporting these programs and students like you!

Included with this packet are some forms to fill out related to surveys we would like you to take in the future. As part of the Consortium, your program is participating in a long-term research study to understand what you and other students in your program do after finishing your research, and how this experience has impacted you. We hope you will be willing to return the forms and participate in these online surveys in the future!

We encourage you to stay in touch with the Consortium on social media - see what students in other programs are doing in their courses and research experiences, be the first to know about upcoming Consortium and other science-related events for high school students, and network with other high school science researchers!

Website: <http://www.studentresearchnyc.org>

Facebook: www.facebook.com/nycsrmc

Twitter: @nycsrmc

Instagram: nycsrmc

LinkedIn: <https://www.linkedin.com/company/nyc-science-research-mentoring-consortium>

Sincerely,

NYC Science Research Mentoring
Consortium Team

Dear student,

Congratulations on your acceptance to the BRAINYAC program. This program is part of a consortium of New York City-based institutions that provides research opportunities for high school students who might not otherwise have the chance to do authentic scientific research. The Pinkerton Foundation is a proud funder of the consortium and its member programs. Upon your successful completion of the research experience outlined below, you will join the ranks of a select group of New York City high school science researchers and become a Pinkerton Science Scholar.

A successful Pinkerton Science Scholar has participated in a program where she or he completed:

- At least 70 hours of preparatory coursework that meets or exceeds the standards for high school science courses.
- An authentic science research project, mentored closely by the scientist conducting the research, for approximately 100 hours.
- A culminating project including the development and presentation of her or his research.
- Research in and reading of scientific journals and presentations to develop fluency in science communications.
- Workshops on academic guidance and career exposure for students on a pathway to a STEM career.

As you begin your program, know that The Pinkerton Foundation is invested in your success. Becoming a Pinkerton Science Scholar is a noteworthy accomplishment, and we encourage you to include this recognition in your college applications and resume. Not every student in New York City commits to putting in the time and hard work to complete the program's rigorous requirements. And you can be justifiably proud of this achievement.

I look forward to hearing that you have completed your science research program successfully and to formally conferring your designation as a Pinkerton Science Scholar.

Sincerely,



Richard M. Smith
President, The Pinkerton Foundation

NYC Science Research Mentoring Consortium

Survey Information

NYC Science Research Mentoring Consortium is conducting a research study in which we are investigating the ways in which providing high school students with authentic science experiences through mentored research internships may and may not support their interests and choices in pursuing science careers.

In this study we are focused on learning more about:

- your interests in science
- your perceptions of scientists
- your intent to study science in high school and college
- the people in your life who have influenced your interests in science

The results from this study will help us design more effective and appropriate programs for future students.

In order to participate, you must complete the Asset and Consent Forms found on the following pages. These forms explain the study, your rights as a participant, and how your information will be collected and kept confidential:

- You must complete our Informed Assent Form.
- If you are under 18, your parent/guardian must complete our Informed Consent Form

Spanish versions of the forms are also available.

Once your Consent Forms have been submitted, you will be emailed a survey link! Students that complete the survey will be emailed a \$20 Amazon gift card.

If you have any questions, please contact [REDACTED] Rachel is our education research fellow working on this study. She is available by email at [REDACTED] or you can text our research study cell phone at [REDACTED]

Thank you for considering participating in this important study!

Assent Form – STUDENT MUST SIGN

Project Name: Staying in Science: Examining the pathways of underrepresented youth mentored in research

PI Names: Dr. Preeti Gupta, Director of Youth Learning and Research at AMNH, Dr. Karen Hammerness, Director of Research and Evaluation at AMNH and Dr. Tim Podkul, Senior Scientist at SRI International

We are conducting a research study in which we are investigating the ways in which providing high school students with authentic science experiences may and may not support their interests and choices in pursuing science careers. In this study we are focused on learning more about your interests in science, your perceptions of scientists, your intent to study science and to get a better understanding of various people in your life who have influenced your interests in science. The results from this study will help us design more effective and appropriate programs for future students. If you take part in this study, we will ask you to complete an online survey which will take about 30 minutes. If you choose, you may fill out a second survey that will take about 45 minutes. You may be contacted for a follow-up interview and can choose to opt in or out of participating in an interview with a researcher.

You do not have to be in the study if you do not want to. You can say Yes or No. If you say yes now, you can change your mind later. You may be worried that your answers on the surveys are not right, but, there are no right or wrong answers. We will not use your real name in any reports or writing we do about this study. There are no risks to participation in this study except that you may have to think about negative experiences in your research program if you experienced any of them. The benefits are that you will be able to reflect positively on aspects of the program experience that did work and contribute to a national understanding of science research programs. We will also be able to offer you an Amazon gift card for each survey you complete and for participating in a follow-up interview.

If you have any questions about this research project, please contact: Preeti Gupta at (212) 769-5172 or by email at pgupta@amnh.org. If you have questions about your rights or welfare as a participant, please contact Barbara Green in the Institutional Review Board (IRB) Office, at (212) 769-5975 or by email at bgreen@amnh.org.

Please **check** the appropriate box and **complete** below

☐

I WANT TO BE IN THE STUDY

☐

I DO NOT WANT TO BE IN THE STUDY

Participant's (STUDENT'S) Name: _____

Participant's (STUDENT'S) Signature: _____

Date: _____

Participant's email address: _____

Participant's (cell) phone number: _____

Note: You will only be contacted via email and/or cell phone number with information regarding your participation in the research, specifically opportunities to take surveys and participate in interviews and/or focus groups.

Signature of Person Obtaining Assent – RESEARCHER _____

DATE: _____

Parent/Guardian Consent Form – PARENTS/GUARDIANS MUST SIGN

Project Name: Staying in Science: Examining the pathways of underrepresented youth mentored in research

PI Names: Dr. Preeti Gupta, Director of Youth Learning and Research at AMNH, Dr. Karen Hammerness, Director of Research and Evaluation at AMNH and Dr. Tim Podkul, Senior Scientist at SRI International

Dear Parent/Guardian:

My name is Preeti Gupta, and I am the Director of Youth Learning and Research at the American Museum of Natural History. We are doing a research study in which we investigate the ways in which providing high school students with science research experiences may and may not support their interests and choices in pursuing science careers. In this study we are focused on learning more about your child's interests in science, perceptions of scientists, intent to study science, and the people who have influenced their interests in science. The results from this study will help us design more effective and appropriate programs for future students. If your child takes part in this study, we will ask them to complete two online surveys that take approximately 30 minutes. Your child will be given time during their research program to complete it, if needed. Your child may be contacted for a follow-up interview. Your child does not have to complete the survey or an interview and can change their mind about participating at any time. Your child's participation in their program will not be affected in any way. If your child agrees to participate, we have arranged to send Amazon gift cards as a thank you gift for completing the surveys and any follow-up interviews.

NOTE: If you and your child consent/assent to participate in this study, a link to the surveys will be sent to them via their contact information provided by them on their assent form. Your child will only be contacted via their email address and/or cell phone number for the purpose of sending links to surveys and to request and schedule follow-up interviews. Each link includes an option to opt out of the study, providing your child with an option to not participate. Your child's email address and cell phone number will be kept confidential and be stored in a secure database that only researchers on this project have access to.

You and your child do not have to be in the study if you do not want to. You can say Yes or No. If you say yes now, you can change your mind later. There are no right or wrong answers to survey questions. We will not use your child's real name in any reports or publications from this research—all data from the surveys will be reported numerically, with names not attached. There are no risks to participation in this study except that your child may have to think about negative experiences in their research program if they experienced any. The benefits are that they will be able to reflect positively on aspects of the program experience that did work and contribute to a national understanding of science research programs.

If you have any questions about this research project, please contact: Preeti Gupta at (212) 769-5172 or by email at pgupta@amnh.org. If you have questions about your rights or welfare as a participant, please contact Barbara Green in the Institutional Review Board (IRB) Office, at (212) 769-5975 or by email at bgreen@amnh.org. Your signature indicates that this study has been explained to you, that your questions have been answered, and that you agree to let your child take part in this study. You will receive a copy of this form.

Please **check** the appropriate box and **complete below**

☐

I WANT MY CHILD TO PARTICIPATE IN THE STUDY

☐

I DO NOT WANT MY CHILD TO PARTICIPATE IN THE STUDY

Parent/Guardian's name (printed): _____

Child's name (printed): _____

Parent/Guardian's Signature: _____

Formulario de consentimiento – ESTUDIANTE DEBE FIRMAR

Nombre del proyecto: Permanecer en Ciencias: Examinando las rutas de la juventud con poca representación en la investigación tutelada

Nombres PI: Dr. Preeti Gupta, Director de Aprendizaje Juvenil e Investigación en AMNH; Dra. Karen Hammerness, Directora de Investigación y Evaluación en AMNH; y Dr. Tim Podkul, Científico Sênior en SRI International

Estamos realizando un estudio de investigación para estudiar las formas en las que proporcionando experiencias de investigación científica a estudiantes de la escuela secundaria, podrían o no estos estudiantes conservar su interés y opciones para seguir carreras científicas. En este estudio nos enfocamos en aprender más sobre su interés en la ciencia, su percepción de los científicos, su intención de estudiar la ciencia y obtener una mejor comprensión de varias personas en su vida que han influido en su interés en la ciencia. Los resultados de este estudio nos ayudarán a diseñar programas más eficaces y apropiados para los futuros estudiantes. Si participa en este estudio, le pediremos que complete una encuesta en línea que durará aproximadamente 30 minutos. Si lo desea, puede completar una segunda encuesta que tomará aproximadamente 45 minutos. Podría ser contactado para una entrevista de seguimiento y puede optar por participar o no en una entrevista con un investigador.

No tiene que estar en el estudio si no quiere. Puede decir Sí o No. Si dice sí ahora, puede cambiar de opinión más adelante. Es posible que le preocupe que sus respuestas en las encuestas no sean correctas, pero no hay respuesta correcta o incorrecta. No usaremos su nombre real en ningún informe o escrito que hagamos sobre este estudio. No hay riesgos de participación en este estudio, excepto que es posible que tenga que pensar en experiencias negativas en su programa de investigación si experimentó cualquiera de ellos. Los beneficios son que podrá reflexionar positivamente sobre los aspectos de la experiencia del programa que sí funcionó y contribuir a una comprensión nacional de los programas de investigación en ciencias. También podremos ofrecerle una tarjeta de regalo de Amazon por cada encuesta que complete y por participar en una entrevista de seguimiento.

Si tiene alguna pregunta acerca de este proyecto de investigación, por favor, póngase en contacto con: Preeti Gupta al (212) 769-5172 o por correo electrónico a pgupta@amnh.org. Si tiene preguntas acerca de sus derechos o bienestar como participante, por favor, póngase en contacto con Barbara Green en la Oficina de la Junta de Revisión Institucional (IRB), al (212) 769-5975 o por correo electrónico a bgreen@amnh.org.

Por favor, **marque** la casilla correspondiente y **complete a continuación**

☐

QUIERO ESTAR EN EL ESTUDIO

☐

NO QUIERO ESTAR EN EL ESTUDIO

Nombre del participante (ESTUDIANTE): _____

Firma del participante (ESTUDIANTE): _____

Fecha: _____

Dirección de correo electrónico del participante: _____

Número de teléfono (celular) del participante: _____

Nota: Sólo se le contactará por correo electrónico y/o número de teléfono celular con información sobre su participación en la investigación, específicamente oportunidades para realizar encuestas y participar en entrevistas y/o grupos de discusión.

Firma de la persona que obtiene el consentimiento – INVESTIGADOR _____

FECHA: _____

Formulario de consentimiento de los padres/tutores - PADRES/TUTORES DEBEN FIRMAR

Nombre del proyecto: Permanecer en Ciencias: Examinando las rutas de la juventud con poca representación en la investigación tutelada

Nombres PI: Dr. Preeti Gupta, Director de Aprendizaje Juvenil e Investigación en AMNH; Dra. Karen Hammerness, Directora de Investigación y Evaluación en AMNH; y Dr. Tim Podkul, Científico S nior en SRI International

Estimado padre/tutor:

Mi nombre es Preeti Gupta, y soy Director de Aprendizaje Juvenil e Investigaci n en el Museo Americano de Historia Natural. Estamos haciendo un estudio de investigaci n en el que se investigan las formas en que proporcionar experiencias de investigaci n cient fica a estudiantes de la escuela secundaria puede o no mantener sus intereses y opciones en seguir carreras cient ficas. En este estudio, nos enfocamos en aprender m s sobre los intereses de su hijo en la ciencia, las percepciones de los cient ficos, la intenci n de estudiar la ciencia y las personas que han influido en sus intereses en la ciencia. Los resultados de este estudio nos ayudar n a dise ar programas m s eficaces y apropiados para los futuros estudiantes. Si su hijo participa en este estudio, le pediremos que complete dos encuestas en l nea que demoran aproximadamente 30 minutos. Se le dar  tiempo a su hijo durante su programa de investigaci n para que lo complete, si es necesario. Su hijo puede ser contactado para una entrevista de seguimiento. Su hijo no tiene que completar la encuesta o una entrevista y en cualquier momento puede cambiar de opini n acerca de participar. La participaci n de su hijo en el programa no se ver  afectada de ninguna manera. Si su hijo acepta participar, hemos acordado enviar tarjetas de regalo de Amazon como agradecimiento por completar las encuestas y las entrevistas de seguimiento.

NOTA: Si usted y su hijo consienten en participar en este estudio, se les enviar  un enlace a las encuestas a trav s de la informaci n de contacto que ellos proporcionaron en su formulario de consentimiento. Solo se contactar  a su hijo a trav s de su direcci n de correo electr nico o n mero de tel fono celular con el fin de enviar enlaces a las encuestas, y para solicitar y programar entrevistas de seguimiento. Cada enlace incluye una opci n para excluirse del estudio, brind ndole a su hijo la opci n de no participar. La direcci n de correo electr nico y el n mero de tel fono celular de su hijo se mantendr n confidenciales y se almacenar n en una base de datos segura a la que solo tendr n acceso los investigadores de este proyecto.

Usted y su hijo no tienen que participar en el estudio si no quieren. Puede decir S  o No. Si dice s  ahora, puede cambiar de opini n m s adelante. No hay respuestas correctas ni incorrectas a las preguntas de la encuesta. No vamos a utilizar el verdadero nombre de su hijo en ning n informe o publicaci n de esta investigaci n; todos los datos de la encuesta se informar n num ricamente, con nombres no adjuntados. No hay riesgos de participaci n en este estudio, excepto que es posible que su hijo tenga que pensar en experiencias negativas en su programa de investigaci n si llegase a experimentar alguna. Los beneficios son que  l/ella ser  capaz de reflexionar positivamente sobre los aspectos de la experiencia del programa que s  funcionaron y contribuir a una comprensi n nacional de los programas de investigaci n en ciencias.

Si tiene alguna pregunta acerca de este proyecto de investigaci n, p ngase en contacto con: Preeti Gupta al (212) 769-5172 o por correo electr nico a pgupta@amnh.org. Si tiene preguntas acerca de sus derechos o bienestar como participante, p ngase en contacto con Barbara Green en la Oficina de la Junta de Revisi n Institucional (IRB), al (212) 769-5975 o por correo electr nico a bgreen@amnh.org. Su firma indica que se le ha explicado este estudio, que sus preguntas han sido contestadas y que acepta que su hijo tome parte en este estudio. Usted recibir  una copia de este formulario.

Por favor, **marque** la casilla correspondiente y **complete a continuaci n**

☐

QUIERO QUE MI HIJO PARTICIPE EN EL ESTUDIO

☐

NO QUIERO QUE MI HIJO PARTICIPE EN EL ESTUDIO

Nombre del padre/tutor (letra de molde): _____

Nombre del ni o (letra de molde): _____

Firma del padre/tutor: _____

GUIDELINES FOR SHORT-TERM VISITORS IN RESEARCH-RELATED AND CLINICAL ACTIVITIES¹

Introduction:

Columbia University (“University”) benefits from the presence of many visitors who come to the University for limited periods of time to receive research training or observe research activities and, at the Columbia University Medical Center (“CUMC”), to train or observe in the context of its clinical programs. In many cases, such visitors are appointed as officers of research or instruction or designated as visiting scholars or visiting scientists, as set forth in the Columbia University *Faculty Handbook* (see Chapters III, IV and VIII).² In a few exceptions, short-term visitors have no appointment, formal affiliation, or other designation with the University (“Short-Term Visitors”). Short-Term Visitors may include high school students, visiting undergraduates, post-baccalaureates, and other observers (who observe, but do not practice, research or clinical techniques or processes) or trainees (who receive training in research or clinical techniques or processes, including practice with appropriate supervision).

Short-Term Visitors may not be compensated. For example, high school students, such as Intel Science Talent scholars, may participate in laboratory activities as part of an educational/mentoring program sponsored by their school or other educational organization in conjunction with the University. However, such students may not be compensated. In some special instances, with authorization, visitors may receive a sponsored internship stipend, such as the National Institutes of Health Supplements Providing Summer Research Experiences for Students and Science Educators.

Except in unusual circumstances, Short-Term Visitors may not remain at the University for longer than three months without an appointment as an officer of research or the designation of visiting scholar or visiting scientist.

While the presence of visitors promotes the mission of the University, we have an obligation to ensure that their activities are conducted in a safe, professional and responsible manner. These Guidelines are designed to achieve that end. Nothing in them should be interpreted to change existing University policies on the appointment of officers of research and instruction and the designation of visiting scholars and visiting scientists. All visitors are subject to University policies and procedures, as well as applicable federal, state and local laws that may apply to their activities.

Visitors may not perform work that would otherwise be performed by University employees and their services may not be considered compensable work. Visitors who do work that is of benefit

¹ These Guidelines are University-wide. CUMC has adopted these Visitor Guidelines with respect to clinical activities as well as research.

² As set forth in the *Faculty Handbook*, anyone participating in collaborative research with a Columbia researcher must receive an appointment as an officer of research or instruction. By contrast, visitors who come to Columbia to conduct their own research or scholarship are designated visiting scientists or visiting scholars.

to the University and that otherwise would be performed by employees of the University may be considered entitled to wages by the U.S. or New York State Department of Labor.

Guidelines:

The University has well-established procedures for making appointments as officers of research and instruction or designating individuals as visiting scholars and visiting scientists. Questions about whether someone should receive an appointment should be directed to the University's Associate Provost for Academic Appointments or at CUMC, to the Director of the Office of Faculty Affairs. For CUMC, the International Affairs Office is responsible for designating visiting scholars and visiting scientists (including both international and U.S. individuals). For the rest of the University, the Associate Provost/Director of the Office of International Students and Scholars is responsible for these designations.

It is the responsibility of sponsoring investigators and departmental administrators to ensure that all visitors: (1) have received the necessary training and/or approvals in the following areas; and (2) comply with all relevant University rules and policies during their stay.

Prior to beginning any assignment, all CUMC visitors who are subject to Joint Commission mandates must comply with the CUMC's drug screening/background check guidelines as well as the medical surveillance protocols.³ Such visitors may also be required to fulfill additional requirements under New York Presbyterian Hospital (NYP) policies and procedures.

A. Environmental Health and Safety; Radiation Safety

All visitors must attend the applicable Environmental Health and Safety training sessions. Individuals may identify safety training through the Research Compliance Training Finder, referenced above. Department administrators and principal investigators must make visitors aware of basic institutional safety policies and procedures that are applicable to regular employees. Visitors training or observing in laboratories must read the University's Laboratory Safety and Chemical Hygiene Plan, available at <http://ehs.columbia.edu/Policy1.1.html>, as well as the host laboratory's Laboratory Assessment Tool and Chemical Hygiene Plan (LATCH), available in the laboratory.

Prior to undertaking laboratory activities, visitors must attend Laboratory Safety, Chemical Hygiene and Hazardous Waste Management training and, if applicable, Formaldehyde/Xylene, Biological Safety/Bloodborne Pathogen, Laser and/or Radiation Safety training.

The principal investigator or the visitor's sponsor, or his/her designee, will provide task-specific training in handling hazardous materials:

- Visitors with no prior experience may not handle hazardous materials until they can demonstrate technical proficiency obtained through initial work with non-hazardous materials. (e.g., use of water to demonstrate and teach dilution techniques at the outset of activities). A progression of activities will be assigned as techniques are learned and proficiency developed to the satisfaction of the principal investigator or the visitor's sponsor.
- For those with prior experience in handling hazardous materials, the principal investigator or the visitor's sponsor, or his/her designee, will assess the level of competency and provide further training as needed if a progression of work activities is required.

Visitors may not perform any spill clean-up activities other than those necessary for the immediate protection of themselves and others.

The involvement of visitors in the handling of hazardous waste is limited to placing the waste in designated containers; they may not be involved with labeling, identification or storage of the waste. Those are responsibilities of trained laboratory staff members.

Visitors who may be exposed to radioactive material or ionizing radiation must contact the Office of Environmental Health and Safety to enroll in the dosimetry program that monitors radiation exposure.

B. Privacy

No visitor may have access to patient records or protected health information without completing the University's general HIPAA training. This includes access to electronic clinical information, hard copy records, or protected health information in any other format. To register for general HIPAA training, send an email to HIPAA@columbia.edu.

All CUMC visitors must complete an institutional Confidentiality Agreement, attached at the end of these Guidelines.

C. Medical Surveillance

Visitors at CUMC who may be present in patient care settings are subject to the University's Medical Surveillance Policies and Procedures through Workforce Health and Safety. If Visitors will come into contact with patients at NYP, then the visitor is subject to the NYPH Medical Clearance process under their Policies and Procedures. Any specific questions or concerns regarding the CUMC Medical Surveillance process must be handled with CUMC HR and they will work with Workforce Health and Safety to address concerns and review special circumstances.

³ The Joint Commission requirements are applicable to all employees, casuals, students or visitors who have direct patient contact in NYP through the delivery of treatment, the conduct of evaluation, the enrollment of patients in studies, or the collection of data or specimens.

D. Research Subjects

Visitors may not conduct or collaborate on human subjects research without an appointment as an officer of research or instruction. They must be added to the relevant Institutional Review Board protocol for prior approval of the University's Institutional Review Board, and must complete all applicable training, including but not limited to on-line training in human subjects protection and both general HIPAA training (see Section B) and on-line HIPAA Training for Researchers (available in Rascal).

Visitors may not participate in activities that directly involve vertebrate research animals without the prior approval of the University's Institutional Animal Care and Use Committee. The principal investigator is required to include the names, qualifications and activities of all visitors in his/her animal protocol form, together with a description of the activities that the visitors will perform on animals. Prior to undertaking such activities, visitors must attend the Institutional Animal Care and Use Committee regulatory lecture, take any required web-based species-specific training courses, and/or attend any required wet lab training offered by the Institute of Comparative Medicine. In addition, they are subject to the University's Medical Surveillance Policies and Procedures for the applicable campus.

E. Accidents or Emergencies

In the event of an accident or emergency, the same procedures used for employees should be used for visitors. The individual should be treated (a) for the Morningside campus, at the Student Health Services or the Emergency Room at St. Luke's Hospital, (b) for Lamont, at the Emergency Room at Nyack Hospital, (c) for Nevis, at the Emergency Room at Dobbs Ferry Hospital, or (d) at CUMC, Workforce Health and Safety or Emergency Room at NYP. In each case, the appropriate Human Resources office should be notified and a Departmental Accident Report Form should be completed and sent to University Risk Management..

F. Miscellaneous

The University reserves the right to withdraw any visitor privileges and remove a visitor from campus without prior notice.

No Short-Term Visitor will be allowed on any ship owned or operated by the University.

G. Provisions for Short-term Visitors Who Are Minors or Who Work with Minors

Research participants under the age of eighteen are "minors" for purposes of New York State law. We ask that you familiarize yourself with and follow Columbia's policy on the [Protection of Minors](#). For more information, please visit the Protection of Minors website at <http://www.compliance.columbia.edu/minors.html>.

Where minors participate in research-related activities in University laboratories (as opposed to being present during a tour for strictly observational purposes), additional requirements apply:

- The attached Parental Consent Form must be filled out and signed by a parent or guardian of the minor visitor prior to observing or participating in any research related activities.
- No one under the age of fourteen is allowed in any University laboratory (except if present on an organized tour or field trip for strictly observational purposes, provided hazards are minimized).
- Minors between ages 14 and 18 may participate in certain research-related activities in a laboratory, so long as they have completed applicable safety training and they are directly supervised by the principal investigator, sponsor or his or her designee.
- No one under the age of 18 is allowed to be alone in a laboratory.
- No one under the age of 18 may handle human blood, human cell lines or any other material defined as “other potentially infectious materials” by OSHA (Bloodborne Pathogens Standard 29 CFR 1910.1030).
- No one under the age of 18 may work directly with vertebrate animals or enter Institute for Comparative Medicine facilities where such animals are housed.

Questions relating to this Policy should be directed to the Associate Provost for Academic Appointments (for non-CUMC departments) or the Director of Faculty Affairs (for CUMC).

COLUMBIA UNIVERSITY

Office of Human Resources

Minor Visitors Parental Consent Form

Required for Visitors under 18 years of age

My child, _____, has my permission to participate as a visitor in the _____ program at Columbia University under the supervision of _____. I understand that, depending on the kind of project being conducted, my child may be required to participate in environmental health and safety programs and/or medical surveillance may be required for visitors working in research, clinical and educational programs at the University.

PLEASE NOTE: For some Visitors at Columbia University Medical Center, a drug screening may be required under the Joint Commission requirements. To the extent that there is a positive drug screening result, both the minor and the parent will be notified. I understand that there may be risk of injury to my child and I agree that I will not hold the Trustees of Columbia University in the City of New York, and its officers, faculty, students, employees, and agents, responsible for any injury that my child may incur at the University or while traveling to and from the University.

Columbia University is committed to promoting a safe environment for minors who participate in our programs and activities. We have taken a number of important steps to establish safeguards for your child. You can read the University's policy and access other helpful resources at <http://compliance.columbia.edu/minors.html>.

My child is covered by the following health care plan:

Insurance Carrier

Policy/Membership Number

Name of Insured

Name of Employer

Signature of Parent or Guardian

Date

Signature of Witness

Date

Print the full name and address of a person who can be reached between the hours of 9:00 a.m. and 5:00 p.m. in case of emergency.

Name

Relationship

Address

Phone Number

Columbia University Medical Center

Confidentiality Agreement

As a faculty member, employee, student, affiliate, visitor or volunteer at Columbia University Medical Center (CUMC) you may have access to what this Agreement refers to as "Confidential Information." The purpose of this Agreement is to help you understand your duty regarding Confidential Information.

"Confidential information" includes information about patients, employees, or students or financial or other business or academic information relating to Columbia University Medical Center. You may learn or have access to confidential information through CUMC=computer systems (which include but are not limited to the clinical, human resources and financial information systems) NewYork-Presbyterian (NYP) Hospital computer systems, through interactions with CUMC students, staff or other faculty, or through your treatment of CUMC patients.

As an individual having access to confidential information, you are required to conduct yourself in strict conformance with applicable laws and CUMC policies governing confidential information. As a condition of your relationship to CUMC, you are required to acknowledge and abide by these duties. A violation of any of these duties will subject you to discipline, which might include, but is not limited to, dismissal of your relationship (faculty appointment, employment, student, consulting, etc.) with CUMC, in addition to legal and/or financial liability.

I understand that I may have access to electronic, printed, or spoken confidential information, which may include, but is not limited to, information relating to:

Patients - including Protected Health Information (PHI), records, conversations, patient financial information, etc.; Employees - including salaries, employment records, disciplinary actions, etc.;

Students - including enrollment, grade and disciplinary information;

Research - including PHI created, collected, or used for research purposes;

CUMC - including but not limited to financial and statistical records, strategic plans, internal reports, memos, peer review information, communications, proprietary computer programs, source code, proprietary technology, etc.;

Third party information - including computer programs, client and vendor proprietary information, source code, proprietary technology, etc.;

PHI and Personal Identifying Information (PII) used in other contexts.

Accordingly, as a condition of, and in consideration of my access to confidential information, I promise that:

1. I will use confidential information only as needed by me to perform my legitimate duties as defined by my relationship (faculty, employment, student, visitor, consulting, etc.) with CUMC.

I will not access confidential information which I have no legitimate need to know.

I will not in any way divulge copy, release, alter, revise, or destroy any confidential information except as properly authorized within the scope of my relationship with CUMC.

I will not misuse or carelessly handle confidential information.

I understand that it is my responsibility to assure that confidential information in my possession is maintained in a physically secure environment.

2. I will safeguard and will not disclose to any other person my access code (password) or any other authorization code that allows me access to confidential information. I will be responsible for misuse or wrongful disclosure of confidential information that may arise from sharing access codes with another person and/or for failure appropriately to safeguard my access code or other authorization to access confidential information.

I will log off computer systems after use.

I will not log on to a system or access confidential information to allow another person access to that information or to use that system.

I will report any suspicion or knowledge that my access code, authorization, or any confidential information has been misused or disclosed without CUMC authorization.

I will not download or transfer computer files containing confidential information to any non-NYP/CUMC authorized computer, data storage device, portable device, telephone, or other device capable of storing digitized data.

I will only print documents containing confidential information in a physically secure environment, will not allow other persons' access to printed confidential information, will store all printed confidential information in a physically secure environment, and will destroy all printed confidential information when my legitimate need for that information ends in a way that protects the confidentiality of the information.

3. I will follow CUMC policies and procedures regarding the use of any portable devices that may contain confidential information including the use of encryption or other equivalent method of protection.
4. I acknowledge my obligation to report to the CUMC Privacy Officer any practice by another person that violates these obligations or puts CUMC, its personnel, or its patients at risk of a disclosure of confidential information.
5. I will only use my Columbia email account to send and receive message that may include confidential information and will not use email to send confidential information to other parties outside of Columbia/NYP without protection to prevent unauthorized access.
6. If I am involved in research, any research utilizing individually identifiable protected health information will be performed in accordance with federal, state, local and Institutional Review Board policies.
7. If I no longer need confidential information, I will dispose in a way that assures others cannot use or disclose it including following the Information Technology policy for disposal of printed confidential information or electronic equipment that may contain confidential information.
8. I understand that my communication using the Columbia University information network is not private and the content of my communication may be monitored to protect the confidentiality and security of the data.
9. I understand that my obligation under this Agreement will continue after termination of my relationship with CUMC.
10. I understand that I have no right or ownership interest in any confidential information referred to in this Agreement. CUMC may at any time revoke my access code, or access to confidential information. At all times during my relationship, I will act in the best interests of CUMC.

Name (print)

Date

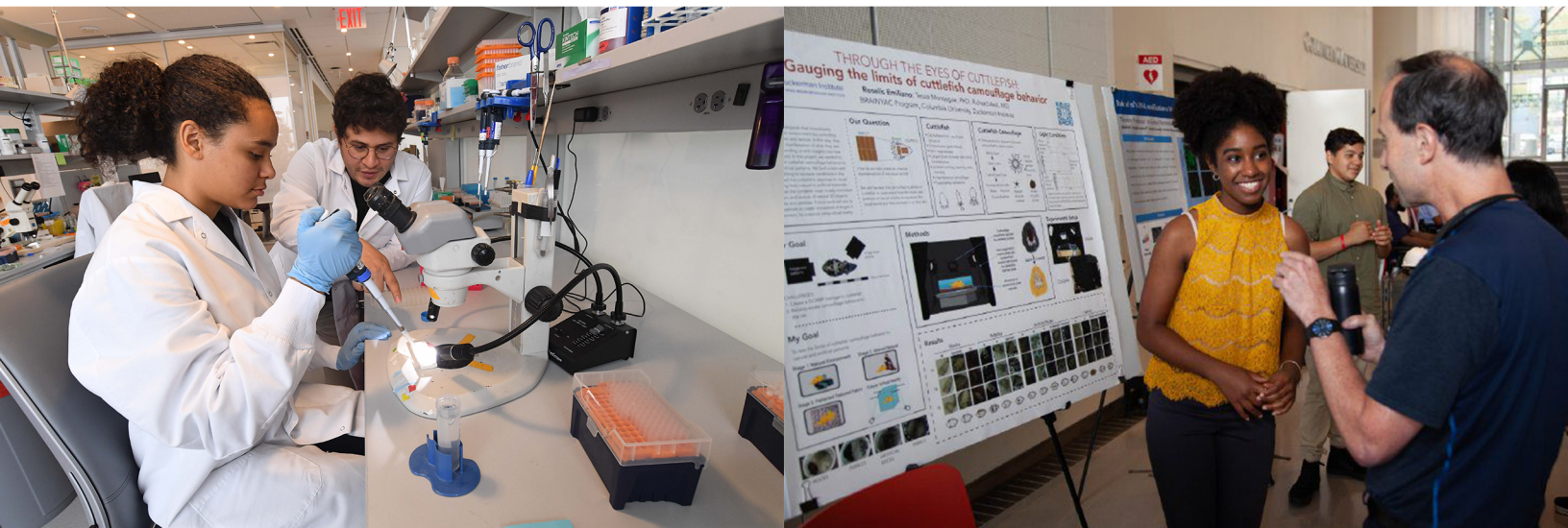
Name (sign)

Department

A copy of this Agreement should be kept in the Department

Invites you to the:

BRAINYAC **Final Poster Presentation**



Join us to celebrate the achievements of our outstanding high-school students as they present their research projects conducted in labs across Columbia University.

Thursday, August 20th, 2020

2:00 pm - 4:00 pm

RSVP for Zoom link: <https://bit.ly/brainyacposter>

The Zuckerman Institute's BRAINYAC (Brain Research Apprenticeships in New York at Columbia) Program matches high-school students with neuroscientists for an immersive scientific research internship at Columbia University and is generously supported by:

BRAINYAC Final Poster Presentation & Graduation

Thursday, August 20th, 2020

2:00 pm - 4:00 pm via Zoom

2:00 Welcome
Keynote by Dr. Olajide Williams
Graduation

2:50 Concurrent poster presentations (Breakout Rooms 1-4)

	1. BIOLOGY	2. COMPUTATION	3. PSYCHOLOGY	4. MRI
2:50 - 3:05	 (PI: Tomlinson)	 (PI: Qian)	 (PI: Baldassano)	 (PI: Vaughan)
3:05 - 3:20	 (PI: Lomvardas & Shapiro)	 (PI: Morrison)	 (PI: Ansorge)	 (PI: Vaughan & Geethanath)
3:20 - 3:35	 (PI: Axel)	 (PI: Mesgarani)	 (PI: Tottenham)	 (PI: Vaughan)
3:35 - 3:50	 (PI: Kernie)	 (PI: Paninski)	 (PI: Ochsner)	

3:50 Closing remarks & social time

Annual Report: Youth Internships - Columbia University Facilities and Operations

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

The Columbia University Facilities and Operations Summer Internship Program is a 6-week long paid internship for high school students living in the local* community who are looking to gain real work experience before graduation. Previous work experience is a plus, but is not required. Interns must be at least 16 years old at the time of the internship and are paid New York State minimum wage.

This summer, the program began on July 14, 2020 and ended on August 21, 2020. Due to COVID-19, the internships were completely remote. Interns were placed in one of the following Facilities and Operations departments: Finance and Administration (Human Resources, IT, Procurement, Code Compliance), Construction Business Initiatives, or Environmental Stewardship.

The internships were fully remote with interns having 60 hours of practical job experience at their assigned department, and 16 hours of enrichment activities. The enrichment activities included a variety of ice-breakers and team building activities, Presentation Skills training, an overview and behind the scenes tour of the new virtual conferencing system (Vmix), a speaker from Alice! Health Promotion, and planning and creating their final presentation. The mentors and interns used Microsoft Team, emails, and conference calls to communicate. On their last day, the interns presented to their mentors and senior staff using Vmix.

** Local refers to those students whose primary resident is located within one of the following 17 zip codes: 10025, 10026, 10027, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10037, 10039, 10040, 10455, 10451, 10454, 10474.*

	Intern Name	Zip Code	High School
1.		10029	Academy for Careers in Television & Film
2.		10454	Alfred E. Smith Career and Technical Education High School
3.		10031	High School of Fashion Industries, The
4.		10040	Manhattan Early College School for Advertising
5.		10026	Manhattan Early College School for Advertising
6.		10029	High School of Economics & Finance
7.		10039	Urban Assembly School for Global Commerce

Additional Supporting Documentation

- Columbia University Facilities and Operations Summer Internship Questionnaire
- Columbia University Facilities and Operations Summer Internship Weekly Schedule

CUFO Summer High School Intern – 2020 Questionnaire

- What is your greatest strength?
- What is a challenge for you? Something you need to work on?
- What are your interests what do you plan on studying in college?
- Please list your computer skills.
- Date of Birth (needed to set up your email address)?

CUFO Summer High School Intern - 2020 Weekly Schedule

Every Thursday the interns spent 2 hours and 40 minutes in enrichment activities, this included ice breakers and team building activities to help bring a sense of camaraderie within the group. The interns worked together to create the final presentation that they would present to their mentors and Facilities & Operations Executive staff.

The first week focused on presentation skills, including how to present remotely, which ended with each intern doing a 2-3 minute presentation complete with at least one slide (most shared two slides).

The second week, Columbia Event Management presented to the interns by reviewing how their business model had to be adjusted from in-person events to remote events. The interns were given a “behind the scenes” tour of the video conference system Event Management had implemented shortly after the pandemic started, and the interns were also informed that they would be using the same system for their final presentation.

During the third week, along with the Assistant Director of Alice! Health Promotion presenting to the interns on wellness, the interns “brainstormed” different themes and ideas for the final presentation, they broke up into two groups of three, and then came together to share ideas and concepts.

The fourth week, the interns were provided with examples of presentations from year’s prior and a video that the Campus Services team had put together to convey information to staff. During this week, the interns broke up again into two groups; one group focused on working on the script and outline of the presentation and the other group focused on the graphics, slide design, and other formatting. The interns agreed that the groups would “meet” during the week to finalize it.

The fifth week, the interns put the final touches on the presentation and practiced, practiced, practiced (this was challenging without them putting their cameras on, but they utilized screen sharing and did several run-throughs with just audio).

During the sixth week, there was a technical rehearsal and then the interns presented. The interns did a terrific job not only on their group project to create an interactive and creative presentation and then present it but also doing so during this unprecedented time. They all showed flexibility and a willingness to collaborate under challenging circumstances.

FACILITIES AND OPERATIONS

[Home](#)[News](#)[Local High School Students Complete First-Ever Remote Summer Internship Program at Columbi](#)

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Local High School Students Complete First-Ever Remote Summer Internship Program at Columbia

After planning to spend the summer training for his upcoming races, [REDACTED], track and cross-country runner and rising senior at the High School of Economics and Finance, never imagined that the Covid-19 pandemic would transform his summer to learning how to use Unifier, a project lifecycle management solution for capital planning, project delivery, and facilities and real estate management, remotely.

August 28, 2020

The summer internship program for local high school students with Columbia University Facilities and Operations looked a little different this summer. The COVID-19 global pandemic restricted access to campus facilities, causing employees to work remotely. But even with on-site work limited, CUFO worked with the Department of Education to on-board six high school students for the first-ever virtual summer internship program. The unexpected shift demanded just as much creativity out of the coordinators as it did the students to get the program up and running during a citywide lockdown. During the six-week program, students gained valuable career development and practical work experience before partaking in the program's graduation ceremony from the safety of their homes, including how to collaboratively work on a team virtually.

"Transitioning and facilitating a virtual internship experience was a major team effort," said Terri Caldes, Director of CUFO Human Resources and coordinator of the CUFO summer high school internship program. "We are so grateful to everyone who helped support the program and kept it going strong during this time."

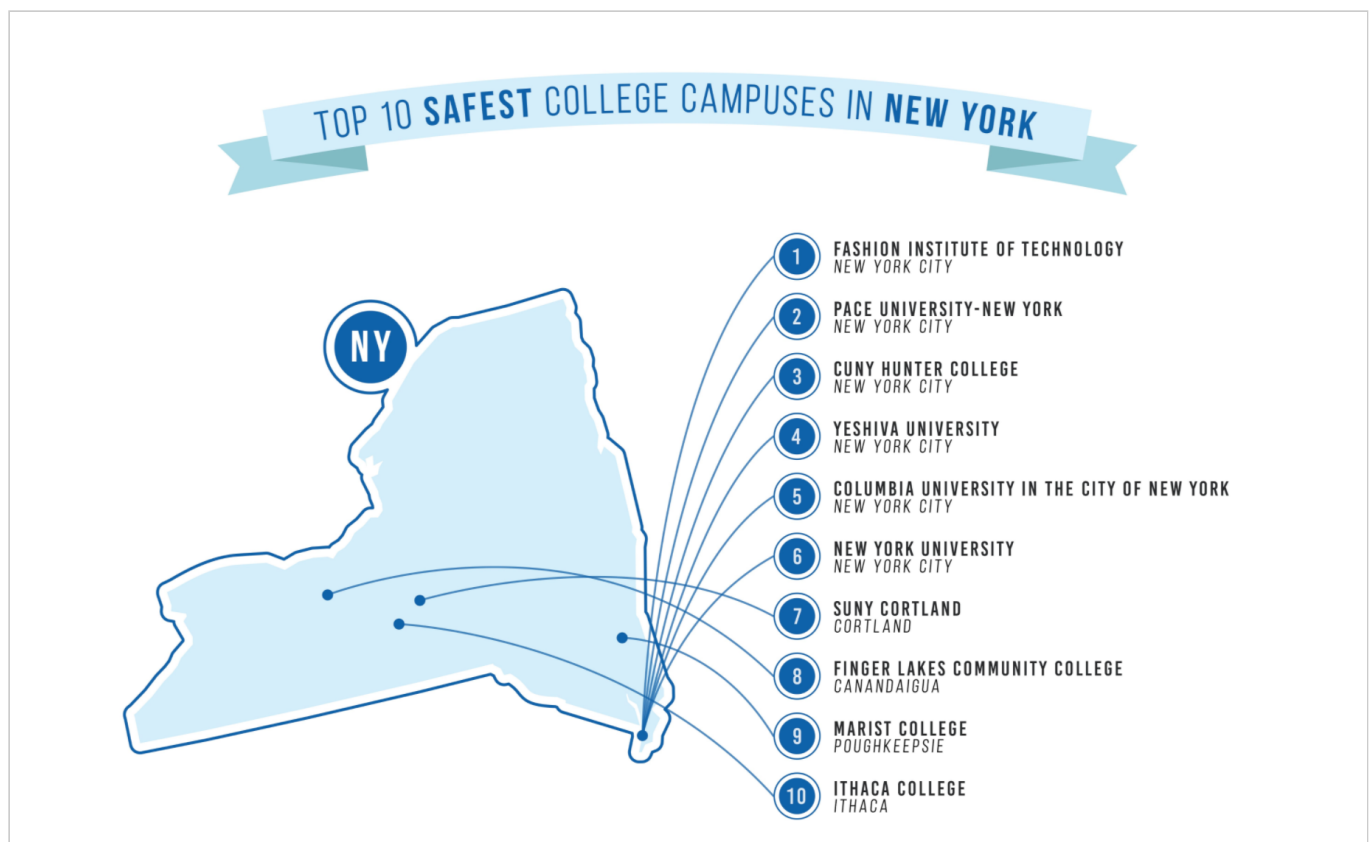
As part of his internship, [REDACTED] supported CUFO's Office of Procurement learning about the rigors it takes for vendors to work with Facilities and Operations. The other interns included (with the department they worked for in parentheses): [REDACTED] (Code Compliance), [REDACTED] (Environmental Stewardship), [REDACTED] (Construction Business Initiatives), [REDACTED] (IT), and [REDACTED] (HR), with interests in pursuing careers ranging from business management, international marketing, economics, visual and production design. All of this summer's program interns live in Upper Manhattan and the Bronx.

“In the beginning, I really did not know what I was getting myself into but I am happy I did this internship because I learned a lot including how to create systems to complete projects and met new people,” says [REDACTED], rising senior at the High School of Fashion Industries majoring in visual merchandising and communications design. [REDACTED] worked with Construction Business Initiatives, supporting the CU Grow Vendor Development Program in preparing for the program’s second virtual procurement event, creating event invitations, and learning how to use Qualtrics to create new systems and manage event registration.

At the closing ceremony, interns gathered virtually with their supervisors and other supporters to present their learnings and experiences over the summer, highlighting that this has been the most unique working experience they’ve had. The virtual programming inadvertently encouraged the students to think more independently and figure out ways to manage work and life balance, an experience they wouldn’t have fully grasped if working on campus. [REDACTED], rising senior at the Academy for Careers in Television and Film learned this first-hand, noting, “I had to work from home which means being in a loud environment with a lot of distractions and moving room to room, but I learned ways around it and how to deal with it.”

Tags: [summer internship](#)

News



September 04, 2020

[Columbia Ranked Top 5 Safest College Campus in New York](#)

Annual Report: Youth Internships - Engineering the Next Generation

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

- Application Deadline: **April 5, 2020**

Following the initial five year Summer Internship Program and in coordination with Columbia Secondary School's leadership, CU modified the internship program to provide a more selective internship to focus on at least one aspect of Science, Technology, Engineering, Environment, Arts and/or Math (STEAM).

With shifts to a virtual model due to COVID-19, the Engineering the Next Generation (ENG) Program ran as a 4-week long intensive summer program at Columbia Engineering for academically competitive high school students during Summer 2020.

Rising high school seniors match with engineering labs and research mentors, and supervised by faculty members. Program components include research, mentoring, college preparation, presentation skills, as well as academic and professional workshops. Students are challenged with high-level academic expectations of both the researchers and undergraduate mentors. This year's program focused on computational research and science communications, with hopes of a possibility for in-person lab shadowing on campus when COVID-19 situations are deemed safe by the university. The program admits from four partner schools; Columbia Secondary School, The High School for Math, Science and Engineering (HSMSE) at the City College of New York, and ELLIS Preparatory Academy, and Bronx Center for Science and Math. Participants must be at least 16 years of age in order to participate and are granted a stipend for their time in the program.

	Intern Name	Zip Code	High School
1.		10460	ELLIS Preparatory Academy
2.		11226	Columbia Secondary School
3.		10467	ELLIS Preparatory Academy
4.		10456	Columbia Secondary School
5.		10030	Columbia Secondary School
6.		10039	Columbia Secondary School
7.		10031	Columbia Secondary School

Additional Supporting Documentation

- ENG 2020 Application Packet
- ENG 2020 Virtual Program Model Details

E.N.G. Summer 2020 Application



Program Description: The E.N.G. program is a 6-week summer research program at Columbia Engineering for academically competitive high school students. Rising high school seniors (i.e. current juniors) will be placed in engineering labs, matched with research mentors, and supervised by Columbia faculty members. The 2020 summer program dates will be from June 29th - August 7th.

Program components include research, mentoring, college preparation, presentation skills, as well as academic and professional development workshops. Possible extensions of the program include continuing research through the following academic year, publication and paper co-authorship, and a letter of recommendation from the research lab's supervising professor.

Eligibility: Students must have completed their junior year of high school by the start of the program to apply. While there is no minimum GPA, students should excel academically overall. Ideally, applicants will have demonstrated an interest and commitment to STEM (for example advanced STEM classes and extracurricular activities). Students must also show strong self-motivation, responsibility, and professionalism. Students will only be awarded a stipend upon successful completion of the program.

Deadline: Applications must be completed and submitted by Friday, April 3, 2020 by 11:59pm EST. Potential finalists for the program will be contacted for an interview prior to admission to the program. Please email engineeringoutreach@columbia.edu if you have any questions or concerns.

Applicant Information

Please provide the following personal information.

First Name:

Last Name:

Preferred Name (Nickname):

Home Address (Include Apt#):

City, State, ZIP:

Email Address:

Phone Number (xxx) xxx-xxxx

Parent/Guardian Information

Please provide the following information on your parent(s) or guardian(s).

Parent/Guardian (1) Full Name:

Email Address:

Phone Number:

Parent/Guardian (2) Full Name:

Email Address:

Phone Number:

Emergency Contact Name:

Phone Number:

School Information

Please provide the following information about your school, school records, and teacher recommendation writer.

Name of School:

Email Address:

You will be asked to upload an unofficial transcript.

Please provide the NAME of one teacher (preferably science or math) who will write a recommendation letter on your behalf. You must ask your teacher to provide the letter; we will follow-up by email to collect this letter:

Please provide this teacher's Email Address:

Extracurricular Information

Please list up to three (3) extracurricular activities in order of importance. Describe your involvement and why each is important to you (100 words max each).

Please make sure to include the following:

- Organization Name
- Your Position/Role
- Number of hours committed per week
- Start date and end date of involvement, or list “present” if ongoing involvement

Extracurricular Activity 1:

Extracurricular Activity 2:

Extracurricular Activity 3:

Essay Questions

Please answer the following essay questions and limit your responses to 300 - 500 words. There are no “right” answers to any of these questions; essays will be judged for creativity, innovation, and your ability to convey your ideas clearly and concisely.

1. Describe a social, personal, or academic challenge that you have faced and how you overcame it.

2a. You are given a box of 1000 marbles of 0.5”, 1”, and 1.5” diameters. Design a device that does not use electricity to pick up 100 marbles and sort them into three different containers by size. Please list all materials used in your device, and use no more than 10 items.

2b. You will have an option to upload a drawing of your device if you so choose.

3. Why do you want to participate in E.N.G.? What will the opportunity to conduct research mean to you now and in the future?

E.N.G. Summer 2020 Virtual Program Model

Program Design

- **Previous Design:** Students are placed in hosting labs for 6 weeks during the summer program, where they are introduced to engineering research under the mentorship of research faculty, graduate students, and staff. During the 6-week program, students take part in daily research skills and college/career-readiness workshops. At the end of the program, participating students present their research findings in a final presentation.
- **Enacted Virtual Program:** Students participated in the ENG 2020 program, focusing on computational, data visualization, and imaging projects. With a shift to a virtual model, students also engaged in weekly science communications projects, in which they ultimately created a digital portfolio (webpage) featuring different multimedia projects on various scientific topics. Students also engaged in weekly journal reading discussion sessions, in collaboration with similar partner programs. Students took place in daily research skills workshops as well as many enrichment workshops and seminars focused on college and career-readiness, research, and more. The possibility for a hands-on and in-person laboratory shadowing for the following Spring 2021 semester is still TBD and dependent on the COVID-19 situation on campus. This summer's program took place for four weeks (July 1-31), and ongoing academic year enrichment will also likely be available through additional workshops and seminars.

Virtual platforms used

- Zoom (video calls for program meetings, lab meetings, workshops, and seminars)
- Slack (day-to-day communications, between all students, program staff, and mentors)

Areas of focus for Summer 2020

- Providing virtual mentorship to participating students such that they can produce a digital multimedia portfolio highlighting their research and science communication by the end of the four-week program.

Number of students

- There were seven (7) rising high school seniors in the 2020 cohort.

Outreach/recruitment strategy

- **Recruitment of High School Student Program Participants:** Personnel at partnership schools (school counselors, teachers) have been contacted to recommend qualifying students to apply for the program. Partnership schools include Columbia Secondary School, ELLIS Preparatory Academy, High School for Science Mathematics and Engineering, and Bronx Center for Science and Mathematics.
- **Recruitment of SEAS Mentors and Facilitators:** SEAS faculty who have previously hosted students in prior years and who have engaged in additional outreach efforts were

contacted; these principal investigators then coordinated within their lab groups to establish graduate student mentors for hosting the high school participants. Facilitators for the program workshops and seminars were coordinated with volunteers who have facilitated similar sessions before in the past; some workshops were offered through other programs, in which ENG students were also welcomed to attend.

Stipend/payment plan

- \$1000 after completion of four-week summer program; \$200 additional for academic year engagement TBD

Plans for Academic Year

- Workshops and seminars will be ongoing as a part of Outreach Programs throughout the academic year, and ENG 2020 participants will be requested to attend.
- ENG 2020 participants will also be asked to present their summer research findings and portfolios at the annual SEAS Undergraduate Research Symposium, which has traditionally been held in October.
- Depending on the COVID-19 situation in the city and on campus, students may have a possibility for visiting their research labs and shadowing mentors in-person during Spring 2021.