

**Manhattanville in West Harlem Implementation Plan Report
October 15, 2018 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

Youth Internships. Commencing in 2010, CU shall create a pilot program for up to 15 summer internships per year for high school students with one-third selected from the local community and two-thirds from the upper level students at the School to support academic and research interests of students. The program shall begin with five students from the local community and add 10 students from the new School when students reach the upper grades and qualify for such an internship. The internships shall initially take place in CU's existing facilities and shall move to the new Academic and Academic Research buildings proposed within the Project Site when constructed. After five years the program shall be reviewed by leadership of the School and CU with the intent of modifying, extending the size and/or renewing the program upon mutual agreement.

*Following the summer 2014 internship program, CU met with the principal of the school and developed the modifications described below.

Five Year Review and Modifications:

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.

At the end of 2018, the Internship Program will be reviewed in consultation with ESD with the intent of modifying and/or renewing the program.

Evidence of Compliance

1. Annual report

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

Manhattanville in West Harlem Implementation Plan Report

October 15, 2018 Submission

EOC Checklist for Obligation 5.07(c)(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 blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, 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 2017 - September 2018**

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.

Internship Program	# of Local Students	# of CSS Students	Total
BRAINYAC	7	2*	9
CUFO	11	0	11
ENG	4	4*	8
TOTAL:	22	6	28

* 2 BRAINYAC and 2 ENG interns from CSS are also local students for a total of 24 local interns.

Contents of Report

- BRAINYAC Annual Report
- BRAINYAC Brochure
- BRAINYAC Partner Program Recruitment Letter
- BRAINYAC Information Session Invitation
- BRAINYAC 2018 Application Packet
- BRAINYAC 2018 Poster Presentation Program
- Columbia University Facilities and Operations (CUFO) Summer Internship Annual Report
- Columbia University Facilities and Operations (CUFO) Summer Internship Flyer
- Columbia University Facilities and Operations (CUFO) Summer Internship Application
- Columbia University Facilities and Operations (CUFO) Summer Internship Friday Schedule
- Engineering the Next Generation (ENG) Annual Report
- Engineering the Next Generation (ENG) Outreach and Application Process
- Engineering the Next Generation (ENG) 2018 Application Packet

Annual Report: Youth Internships - BRAINYAC

State Submission Annual Reporting Period: **October 2017 - September 2018**

- Information Session Date: **October 14, 2017**
- Application Deadline: **November 14, 2017**

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.

	Intern Name	Zip Code	High School
1.		10455	The Young Women's Leadership School of East Harlem
2.		10031	Horace Mann School
3.		10037	Columbia Secondary School
4.		10040	NYC Museum School
5.		10033	Columbia Secondary School
6.		10033	NYC iSchool
7.		10040	City College Academy of the Arts
8.		10027	Harlem Village Academies High School
9.		10454	Manhattan Center for Science and Mathematics

Additional Supporting Documentation

- BRAINYAC Brochure
- BRAINYAC Partner Program Recruitment Letter
- BRAINYAC Information Session Invitation
- BRAINYAC 2018 Application Packet
- BRAINYAC 2018 Poster Presentation Program

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Mortimer B. Zuckerman Mind Brain Behavior Institute

BRAINYAC

Brain Research Apprenticeships In New York At Columbia

The Zuckerman Institute's
BRAINYAC program matches
high school students with brain
scientists for an immersive
laboratory internship

WHAT'S INVOLVED

The BRAINYAC program runs each year from January through August. The first portion, from January to May, is comprised of Saturday morning training sessions generally twice per month. During these sessions, students are prepared for their summer laboratory internship. Training sessions cover basic lab techniques, the essentials of neuroscience and how a lab works. During this time, each student is matched with a neuroscientist at Columbia University who will become the student's mentor for the summer portion of the program.

Starting in late June or early July, students commence the laboratory portion of the program. They work in their internship labs full-time, Monday through Friday, taking part in a research project and are guided by their mentor. Depending on the lab and

BRAINYAC

the project, a student might employ techniques such as microscopy, cell culture, functional imaging analysis and computer modeling.

Students join weekly BRAINYAC advisory sessions throughout their summer. The advisory sessions focus on supporting the students' progress in the labs and advancing their science communication skills.

Students who successfully complete the program receive a stipend that is paid in two installments.

STUDENT ELIGIBILITY

The BRAINYAC program admits students from select BRAINYAC partner programs and schools in Upper Manhattan. Students commit to the entirety of the program from January through August.

APPLICANTS MUST BE:

- sophomores or juniors in high school at the time of application;
- 16 years of age or older by the start of the summer session; and
- enrolled in one of our partner programs: Lang Youth Medical Program; State Pre-College Enrichment Program (S-PREP); Double Discovery Center at Columbia College; or the Columbia Secondary School for Math, Science, & Engineering. (See the Zuckerman Institute website for a complete and updated list.)

Caption Modi volecto quibus eicti amus enimin ctorem sequi. Modi volecto quibus eicti amus enimin ctorem sequi Et laborepudi aut ut quas nimaximust, omni reresequo temperio totation et que reium rem.

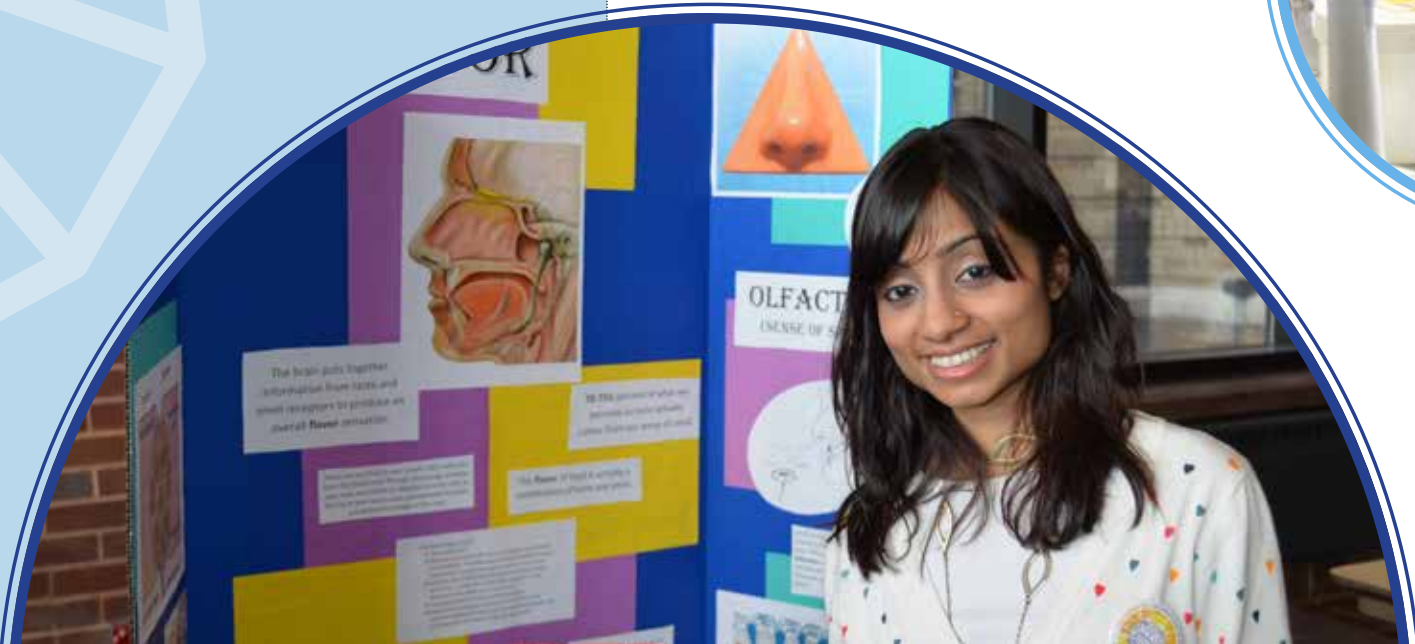


OUTCOMES

At the end of the program in mid-August students present their research to a diverse audience—friends, family, researchers, mentors and the broader Columbia community—during a poster presentation.

Caption Piendem. Quibus eicti amus denimin ctorem sequi tem quiassim quo

Students come away from the program with an enhanced understanding of how lab research can lead to transformative discoveries, exposure to a professional and academic environment and a heightened connection to science as a career.



The Zuckerman Institute's BRAINYAC (Brain Research Apprenticeships in New York at Columbia) program is an immersive science research experience in which high school students train and work in neuroscience laboratories at Columbia University. The program runs every year from January through August. This includes weekend training sessions in the winter and spring and a full-time internship during the summer.

Caption Modi volecto
quibus eicti amus
enimin cturam sequi

APPLICANTS FOR BRAINYAC PROGRAM:

- are genuinely interested in the biomedical sciences;
- demonstrate the maturity needed to work in a sophisticated high-tech lab environment; and
- are willing to commit to the entire program.

Applications are distributed to partner programs and schools in the fall before the program starts in January.



BRAINYAC STUDENTS:

- are introduced to an academic scientific research environment;
- develop laboratory and technical skills;
- boost their understanding of science as it is practiced; and
- build their communication and presentation skills.

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- 📘 zuckermaninstitute

FUNDING PROVIDED BY:

The Pinkerton Foundation

FPO:
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BRAINYAC

Brain Research Apprenticeships In New York At Columbia

The Zuckerman Institute's
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 [zuckermaninstitute](https://www.facebook.com/zuckermaninstitute)

FUNDING PROVIDED BY:

The Pinkerton Foundation

BRAINYAC

615 West 131st Street
6th Floor

New York, NY 10027

brainyac@columbia.edu

212-853-0600

ΙΣΝ / SNF

ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ
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(no subject)

Mon, Sep 25, 2017 at 3:35 PM

To: [REDACTED]

Dear Distinguished partners,

I hope you are enjoying what's left of the summer.

Following the completion of yet another successful BRAINYAC program session, we have commenced recruitment efforts for next year.

Attached is the tentative schedule for BRAINYAC 2018. We hope that the spring sessions will run select Saturdays, indicated in the attached schedule (from January through April) at 9:30am each day.

To that end, we would also like to meet with your students for a recruitment information session on October 14th 2017 from 9:15 am – 10:45 am. During this session, We will share with your students, details about the program, including the online application process and deadline.

Please feel free to contact me if you have any questions. Thank you for your time.

Columbia's Zuckerman Institute presents

BRAINYAC PROGRAM

An immersive neuroscience research experience for high school students

Information session

Saturday, October 14, 2017
9:15 am - 10:45 am

Jerome L. Greene Science Center
Education Lab
605 129th Street, New York

Learn more about:

- Program structure
- Application process and more



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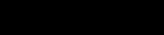
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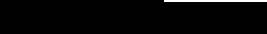
For details, contact




Education Program Manager
Mortimer B. Zuckerman Mind Brain Behavior Institute
Columbia University
Studebaker Building

615 West 131st Street, New York NY 10027

Phone: 

Email: 

<http://zuckermaninstitute.columbia.edu>

<http://zuckermaninstitute.columbia.edu/zuckerman-institute-public-programs>

[Facebook](#) | [Twitter](#) | [Website](#)

2 attachments



BRAINYAC Info Session Invite.pdf

830K



2018 Program Schedule - Google Docs.pdf

81K

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For details, contact



BRAINYAC 2018 APPLICATION PACKET

Instructions

Welcome to the online application for Brain Research Apprenticeships in New York at Columbia (BRAINYAC). This application consists of multiple parts: personal information, parent/guardian information, education, short answer questions, essay questions, personal statement, and interview availability. We recommend that you compose your answers to the short answer and essay questions before beginning the application. You will be able to copy and paste your answers into the boxes provided.

By applying to the program, you commit that you will:

- attend all program sessions
- and be accompanied by a parent or guardian to the parent-student orientation on January 20, 2018 from 2:00 pm to 4:00 pm.

Short answer questions:

1. Describe one extracurricular activity (*organizations, athletics, student government, etc.*) you participated in and why it was meaningful to you. Include community service, if applicable.
2. What kind of laboratory experience do you have (*in school or extracurricular*)

(No previous lab experience outside of the typical high school classes is necessary for this program.)

Essay questions:

1. Describe what makes you a good candidate for the BRAINYAC program. What interests you about the brain and neuroscience? *(Max 300 words)*
2. How would being in the BRAINYAC program help your education and career goals? *(Max 200 words)*

Personal statement:

Write an essay (*650 words or fewer*) that demonstrates your ability to develop and communicate your thoughts. Some ideas include: a person you admire; a life changing experience; your viewpoint on a particular current event or an insight to who you are.

Please direct any questions to:

**Part I: Personal Information**

First Name

Middle Name

Last Name

Which of the BRAINYAC partner programs or school are you enrolled in? *(If you are not currently enrolled in any of these programs, you are ineligible to apply for BRAINYAC)*

- ☐ Lang Youth Program
- ☐ S-PREP
- ☐ Double Discovery Center
- ☐ Columbia Secondary School for Science Math & Engineering

Mailing Address Line 1 (*Number, Street, Apt. #*)

Mailing Address Line 2 (*City, State*)

Zip Code

Cell phone Number (*If available*)

Email Address

Re-type email address

Gender

- ☐ Male
- ☐ Female

Date of Birth (*mm/dd/yyyy*)

Will you be 16 years of age on or before June 30, 2018?

(If you have not turned 16 years old by the start of the lab portion of BRAINYAC, you are ineligible to apply.)

- ☐ Yes
- ☐ No

Part II: Parent/ Guardian Information

Parent/ Guardian name (*First and Last*)

Parent/ Guardian Email Address

Home Telephone Number

Additional Parent/ Guardian Name *(Optional)*

Additional Parent/ Guardian Email Address *(Optional)*

Part III: Education

Name of high school

Current grade in school

☐ 10th grade

☐ 11th grade

List extracurricular activities you are currently involved in. *(organizations, athletics, student government, etc.)*

Part IV: Short Answer Questions

Describe one extracurricular activity *(organizations, athletics, student government, etc.)* participated in and why it was meaningful to you. Include community service, if applicable.)

What kind of laboratory experience do you have *(in school or extracurricular)*
(No previous lab experience outside of the typical high school classes is necessary for this program.)

Part V: Essay Questions and Personal Statement

Describe what makes you a good candidate for the BRAINYAC program. What interests you about the brain and neuroscience? *(Max 300 words)*

How would being in BRAINYAC program help your career goals? *(Max 200 words)*

Write an essay that demonstrates your ability to develop and communicate your thoughts. Some ideas include: a person you admire; a life changing experience; your viewpoint on a particular current event or an insight to who you are. *(650 words or fewer)*

Part VI: Program commitment and interview availability

We will be conducting interviews on the following days and times. Please indicate your availability on at least 3 separate dates, selecting as many time slots possible on each day. Interviews will be approximately 20 minutes and be conducted at Columbia University (Studebaker Building, 615 131st Street, New York). Further details will be provided to applicants invited to interview. Due to on-going constructions, please enter the building at 622 132nd Street.

Please hold dates you indicate below on your calendar until the week of November 21, 2017 when we will confirm your interview date.

	3:00PM to 3:30PM	3:30PM to 4:00PM	4:00PM to 4:30PM	4:30PM to 5:00PM
Monday November 27	☐	☐	☐	☐
Tuesday November 28	☐	☐	☐	☐
Wednesday November 29	☐	☐	☐	☐
Thursday November 30	☐	☐	☐	☐
Friday December 1	☐	☐	☐	☐
Monday December 4	☐	☐	☐	☐
Tuesday December 5	☐	☐	☐	☐
Wednesday December 6	☐	☐	☐	☐
Thursday December 7	☐	☐	☐	☐

Do you commit to attending the BRAINYAC training sessions from 9:00 to 11:00 am on the following Saturdays? January 27, February 3, February 10, March 3, March 17, March 24, April 14, April 21, May 5, May 12 and June 2, 2018?

- ☐ Yes
☐ No

Do you commit to attending a campus tour from 10am to 2pm on (*Chancellor's Day*) Thursday June 7, 2018

- ☐ Yes
☐ Maybe
☐ No

Does your parent/ guardian commit to attend the parent-student orientation on January 20, 2018 from 2:00 pm to 4:00 pm?

- ☐ Yes
☐ No

Do you commit to participating in a scientific research laboratory internship and BRAINYAC advisory sessions from June 30 to August 17, 2018?

- ☐ Yes
- ☐ No

Part VII: Finalize submission

The information submitted above is true and correct to the best of my knowledge.

- ☐ I agree
- ☐ I disagree

I hereby submit my application to BRAINYAC program. *(Name, date)*

Thank you

Thank you for your interest in BRAINYAC program. A member of our team will contact you via email for next steps.

Please direct any questions to:

[REDACTED]
Zuckerman Institute

615 West 131st Street, 6th Floor

New York, NY 10027

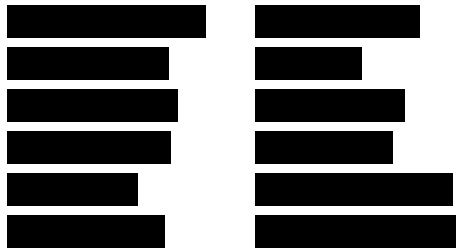
Phone: [REDACTED]

Email: [REDACTED]

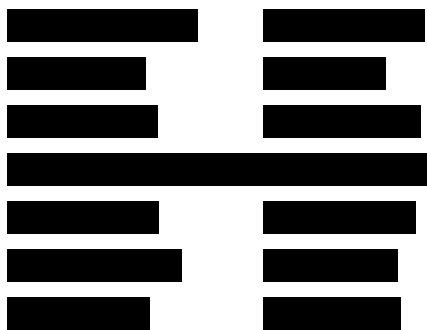
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Special thanks to the:

Principal Investigators and Mentors



Mentors



Program Staff



For more information

Email: programs@zi.columbia.edu Phone: 212.851.9612

Website: zuckermaninstitute.columbia.edu/brainyac

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BRAINYAC Research Poster Presentation & Reception

Celebrating the achievements of the
2018 BRAINYAC graduates

at

Greene Science Center
Education Lab and Building Lobby
3227 Broadway, New York

Thursday, August 16, 2018
2:00pm to 4:00pm



BRAINYAC 2018 graduates

The Zuckerman Institute's BRAINYAC program matches high school students with brain scientists for an immersive laboratory internship



Program Agenda

2:00 pm	Guest arrival
	Opening remarks
	Mentor appreciation
	Presentation of certificates
3:00 - 4:00 pm	Refreshments and research poster presentations
4:00 pm	Departure

A Note of Thanks

The Zuckerman Institute extends a sincere thank you to everyone who joined us here today to celebrate the achievements of the BRAINYAC class of 2018.

We owe a huge thank you to the principal investigators and mentors for opening their labs and mentoring the next generation of scientists. This program wouldn't be possible without their dedication and commitment.

We would also like to acknowledge our funders, the Pinkerton Foundation, the Stavros Niarchos Foundation and the VWR Foundation for their generous support.

We thank all the parents and guardians for their support throughout the program. We are also grateful to the BRAINYAC Alumni Interns for returning to share their experiences and skills.

And finally, a very big congratulations to the BRAINYAC class of 2018 for successfully completing the program. We wish for your continued success through high school and in the next steps of your education and career trajectory.

BRAINYAC Students and Research Projects

[REDACTED]	Changes in Amygdala Activity across Development in a Longitudinal Study
[REDACTED]	The Visual Perception Decoding Hierarchy: Further Deconstructed through the Exploration of Relative and Absolute Orientations
[REDACTED]	Assaying the Contribution of Low-Complexity Domains in Ultrabithorax Hub Formation in <i>Drosophila melanogaster</i>
[REDACTED]	Prophylactic Ketamine Modifies Aversive Memory Traces
[REDACTED]	A Learning Style Theory to Comprehend Autistic Conduct
[REDACTED]	The Role of Mettl3 in Motor Neuron Physiology
[REDACTED]	Developing Tools to Study the Stress Granules Dynamics in HeLa Cells
[REDACTED]	A Change in Perspective: Retrospective Decoding in Working Memory
[REDACTED]	Genome-editing the Sevenless gene in <i>Drosophila melanogaster</i>
[REDACTED]	Assessment of Neuronal Network Dynamics during Temporal Lobe Epileptogenesis through Calcium Imaging of Hippocampal Cell Types
[REDACTED]	Screening Beat Proteins And its Role in Leg Motor Neuron Development in <i>Drosophila melanogaster</i> “
[REDACTED]	Examining Expression of 3 Neuromodulator Receptor Subtypes in the Fruit Fly Visual System
[REDACTED]	The Relationship between Diet Quality and Mental Disorders in Youths
[REDACTED]	Understanding the Romo Data Experience & the Spikes
[REDACTED]	Identifying Transcription Factors that Influence the Stable Expression of Olfactory Receptors in Neurons

Annual Report: Youth Internships - Columbia University Facilities and Operations

State Submission Annual Reporting Period: **October 2017 - September 2018**

- Application Deadline: **Originally May 18, 2018, extended to May 29, 2018**

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 9, 2018 and ended on August 17, 2018. Interns were placed in one of the following Facilities and Operations departments: Manhattanville Development Group, Finance and Administration, Planning and Capital Project Management, Strategic Communications, Student Center Operations, Environmental Stewardship, or Operations. Interns worked in their respective departments from Monday - Thursday and met as a group every Friday for special tours, workshops, and skills training.

* 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.		10027	Business of Sports School
2.		10025	Manhattan Bridges High School
3.		10025	High School of Art and Design
4.		10455	Cambia Heights Academy for New Literacies
5.		10029	High School of Economics and Finance
6.		10032	High School of Economics and Finance
7.		10026	The Urban Assembly School for Green Careers
8.		10455	Brooklyn Technical High School
9.		10454	Brooklyn Technical High School
10.		10033	Inwood Early College
11.		10029	Business of Sports School

Additional Supporting Documentation

- Columbia University Facilities and Operations Summer Internship Flyer
- Columbia University Facilities and Operations Summer Internship Application
- Columbia University Facilities and Operations Summer Internship Friday Schedule

Summer 2018 High School Internships



Columbia University Facilities and Operations provides a wide range of services to the University community, including planning, design, construction management and operations.

This summer, we are offering paid internships for high school students living in the local* community looking to gain real work experience before graduation. Previous work experience is a plus, but not required.

The paid internships begin on July 9, 2018 and end on August 17, 2018.
Applicants must be at least 16 years old at the time of the start of the internship.

Apply for a high school internship by May 18:
cufo.columbia.edu/intern2018

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

Columbia University is an Equal Opportunity/Affirmative Action employer—Race/Gender/Disability/Veteran



Columbia University Facilities and Operations provides a wide range of services to the University community, including planning, design, construction management and operations.

This summer, we are offering paid internships for high school students living in the local* community looking to gain real work experience before graduation. Previous work experience is a plus, but not required.

The paid internships begin on July 9, 2018 and end on August 17, 2018.
Applicants must be at least 16 years old at the time of the start of the internship.

Apply for a high school internship by May 18:
cufo.columbia.edu/intern2018

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

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COLUMBIA UNIVERSITY

Facilities and Operations

High School Internship Application Form

Columbia University Facilities and Operations is offering paid internships for high school students living in the local community looking to gain real work experience before graduation. Previous work experience is a plus, but is not required.

The paid internships begin on July 9, 2018 and end on August 17, 2018.

Please note that in accordance with New York State Law, all applicants must be able to provide an employment certificate (also called "working papers") before they begin work if selected for an intern position. Interns will be paid New York State minimum wage.

Other requirements:

- Must be at least 16 years old by start of internship (July 9, 2018)
- Must live in one of the following local zipcodes: 10025, 10026, 10027, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10037, 10039, 10040, 10451, 10454, 10455 and 10474

In order to be considered for an internship, you must submit this completed application form along with a copy of your resume and a cover letter. You will be able to upload your cover letter and resume at the end of this application form.

Application deadline: May 29, 2018

Please select your zip code from the drop down list below:

Personal Information:

Name:

Street Address:

City

State

Telephone Number:

E-mail Address:

Are you legally eligible to work in the United States?

☐ Yes☐ No

If you are not a U.S. Citizen, are there any restrictions on your eligibility for employment?
Please explain:

Education:

School Name:

School Address:

Anticipated Graduation Date:

Grade Point Average:

Major:

Career Interests:

Please list any scholastic
honors/achievements/activities:

Work History (please include paid, volunteer, and intern positions):

Most Recent Employer:

Location (City/State)

Position Title

Start Date

End Date

Description of Duties:

Past Employer:

Location (City/State):

Supervisor (Name & Title):

Your Position Title:

Start Date:

End Date:

Description of Duties

References (may include teachers, supervisors, family members or volunteer work leaders.) Written references may be submitted with an application. The letter of reference should site specific examples of the candidate's ability to successfully complete the internship if chosen.

Reference #1 Name:

Telephone Number:

Company/School:

Relationship:

Known How Long:

Reference #2 Name:

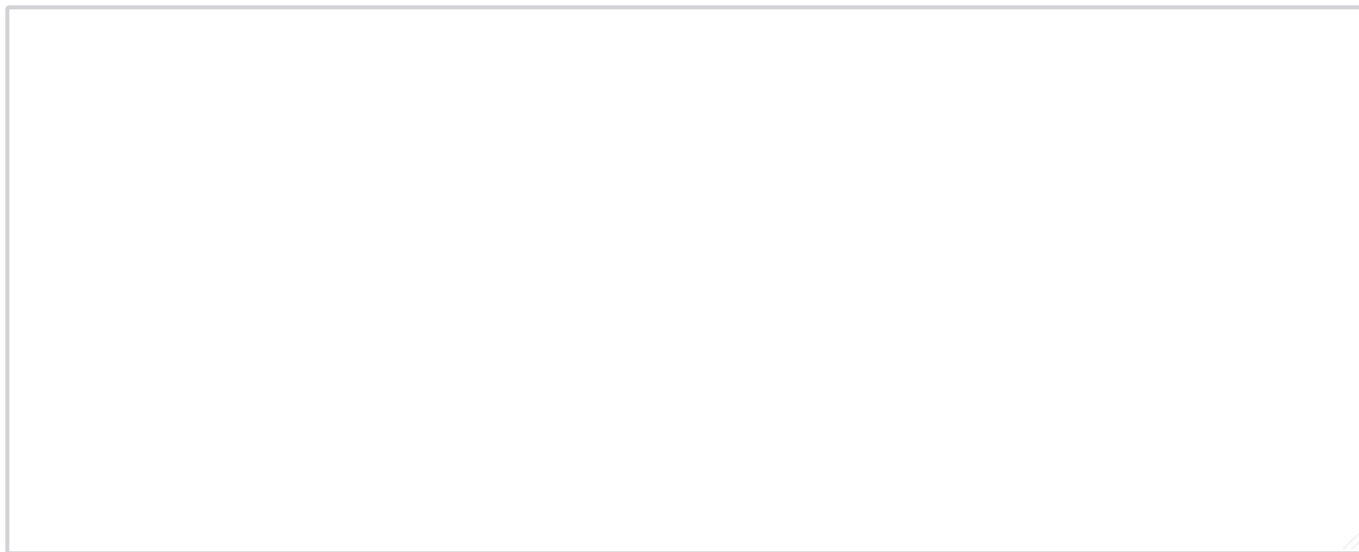
Telephone Number:

Company/School:

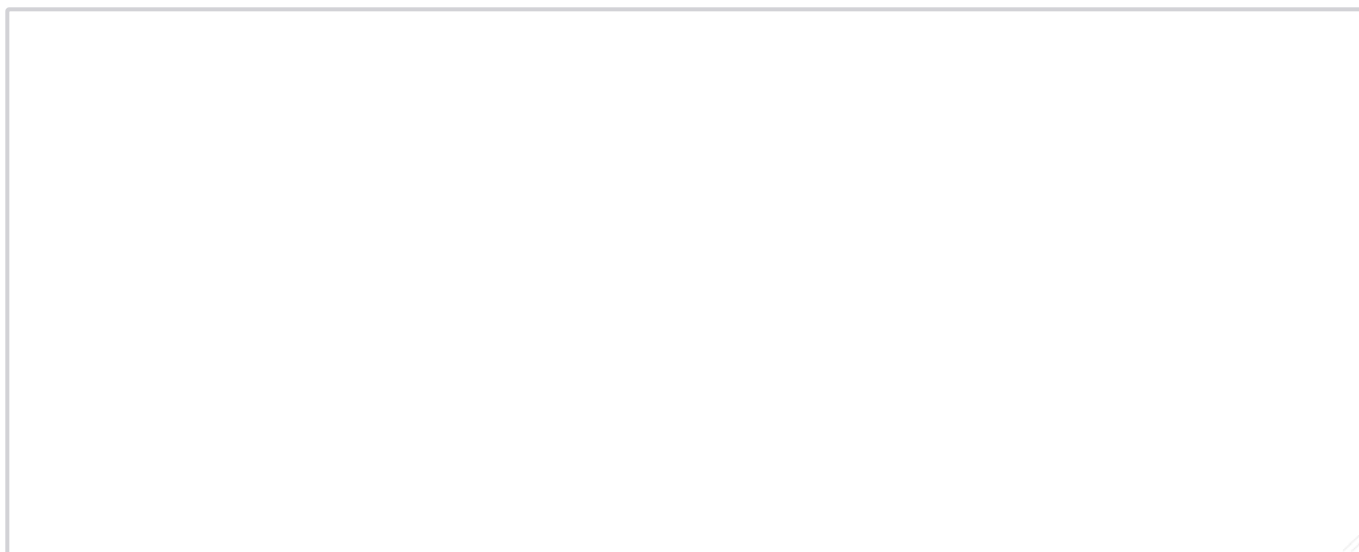
Relationship:

Known How Long:

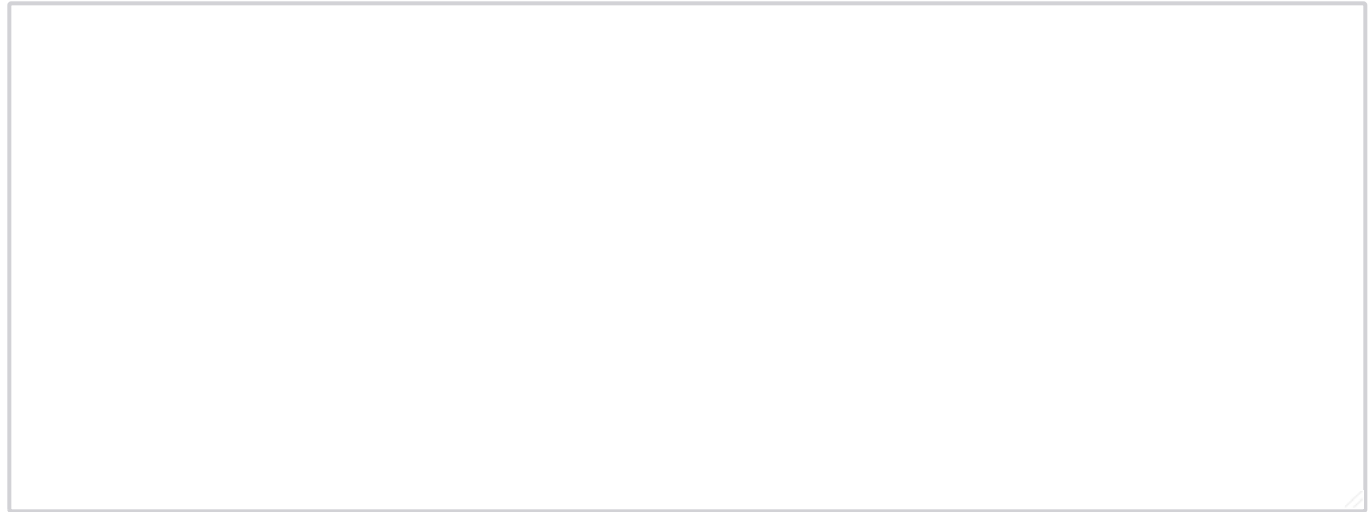
Accomplishments (Community/professional organizations, honors and awards):

A large, empty rectangular text box with a thin gray border, intended for the respondent to enter their accomplishments in community/professional organizations, honors, and awards.

Accomplishments (Activities relevant to the internship for which you are applying):

A large, empty rectangular text box with a thin gray border, intended for the respondent to enter their accomplishments in activities relevant to the internship.

Why would you like to work as an intern at Columbia University?



Please see below for descriptions of each internship position:

Department: Manhattanville Development Group

Project Management Intern:

- Perform architecture/design related tasks, including compiling data and preparing drawings for distribution; assisting in compiling architectural plans; assist in conducting preliminary studies to obtain information as to space and design requirements; research and information gathering for use in various projects.
- Work closely with Project Management team on various task lists, construction updates and construction reports Learn how to conduct effective meetings with clients and contractors and document the meeting with formal minutes
- Assist with filing, organizing and cataloging project documents

Department: Finance and Administration

IT Helpdesk Support Intern:

- Learn how to identify, research, and resolve technical problems
- Respond to telephone calls, email and personnel requests for technical support
- Learn how to document, track and monitor all problems to ensure a timely resolution
- Assist in the installation and configuration of workstations based on needs and requirements

Human Resources Intern:

- Gather information/data on employee engagement
- Organize large database of files
- Attend all team training, meetings, and presentations

Capital Finance Intern:

- Review capital construction capital project documents and high level financial information in order to compile an Excel database of key information from each document
- Learn to use key financial Excel tools to prepare financial summaries geared toward upper management, clients and project management groups
- Prepare a summary of historical capital project contingency usage by category
- Compile historical project expenses by trade into a benchmarking database

Code Compliance Intern:

- Organize and review City certificates, permits, and plans to ensure they are up to date
- Create Excel database of key information for each city permit
- Assist with noting the progress of renovations

Department: Planning and Capital Project Management**Design and Compliance/Capital Project Management Intern:**

- Create directory of plan room files
- Scan and file operations drawings
- Organize compliance binders and progress photos
- Attend meetings with a Project Manager, take notes, record attendance

Department: Strategic Communications and Construction Business Initiatives**Communication and Outreach Support Intern:**

- Help design, develop and distribute effective communication materials for meetings with clients and contractors
- Review and recommend social media strategies to reach targeted audiences

- Track and record commitment outreach efforts to local community
- Conduct research and assist with preparation of presentations and support client relation activities
- Conduct daily review of vendor requests and provide administrative support for document management, expense reports and contact records

Department: Student Center Operations

Student Center Operations Intern:

- The Intern will report to the Welcome Desk Assistant Managers and work side by side with them to support the delivery of services to students, tenants and visitors.
- Participate in the implementation of procedures related to the communication and guest services at the Welcome Desk
- Perform daily inspections of the buildings common areas, office areas, reporting any equipment in need of repair and spaces that are unclean
- Help organize and manage existing data sheets and files for building analytics
- Support special projects during building summer refresh

Department: Environmental Stewardship

Environmental Stewardship Intern:

- Summarize 2018 Transportation Survey data - Make a series of tables using Excel to summarize results from 2018 Transportation Survey
- Audit bike cage for abandoned bikes – write down registration codes for bikes that look abandoned in the bike enclosure
- Weekly Zagster bike checks- record and report bikes that need maintenance
- Develop list of energy efficient fleet alternatives
- Price check video conferencing technologies and develop Excel list for consideration
- Assist with any audits of the organics program throughout the residential portfolio

Department: Operations

Compliance/Work Safety Intern:

- Create a "Safety in the Workplace" guide

- Assist with developing, designing, and distributing communication materials for meetings and trainings
- Attend meetings with members of the Compliance Team, take notes and record attendance
- Organize and review files and records

Please select your first preference for internship position:

Please select your second preference for internship position:

How did you find out about the Columbia University Facilities and Operations High School Internship Program?

If "Other" please write in how you found out about internship program:

Please upload your cover letter.

Drop files or click here to upload

Please upload your resume.

Drop files or click here to upload

If you have a reference letter, you may upload it here.

Drop files or click here to upload

I certify that all of the statements in this application are true and complete to the best of my knowledge. Please sign below with mouse cursor.

 **SIGN HERE**

clear

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Columbia University Facilities and Operations Summer Intern Friday Schedule 2018

Friday, July 13 – Ice Breaker, Presentation Skills Workshop, and Team Building Exercise with [REDACTED]

Friday, July 20 – Overview of Campus Services

- Welcome with [REDACTED], Vice President
- Behind the scenes tour of Roone Aldridge Auditorium with [REDACTED], Executive Director, University Event Management; [REDACTED], Manager, Technical Services; [REDACTED], Supervisor, Technical Services
- Tour of Alfred Lerner Hall with [REDACTED], Assistant Manager, Lerner Hall Welcome Desk
- Tour and Lunch at Ferris Booth Commons with [REDACTED], Assistant Director, Lerner Hall Dining Operations
- Tour of Faculty House with [REDACTED], General Manager
- Overview of the Office of Environmental Stewardship and Recycling Demonstration/Activity with [REDACTED], Manager Operations and [REDACTED], Assistant Director, Outreach & Planning

Friday, July 27 – Tour of the Manhattanville Campus

- Tour of the Manhattanville Power House with [REDACTED], Manager, District Energy Systems and [REDACTED], Project Coordinator
- Visit to the Sheffield Farms Exhibit with [REDACTED], Program Coordinator
- Tour of the Jerome L. Greene Science Center with [REDACTED], Program Coordinator
- Tour of the Wallach Art Gallery and Art Activity with [REDACTED], Associate Director, Education & Public Programs
- Tour of the Lenfest Center for the Arts with [REDACTED], Audience Services Manager
- Overview of Alice! Health Promotion and Health & Wellness discussion with [REDACTED], Chief of Administration (former Executive Director of Alice! Health Promotion)
- Q&A on how to create short videos with [REDACTED], Director, IT

Friday, August 3 – Tour of the Lamont-Doherty Earth Observatory

- Walking tour of the campus with [REDACTED], Manager, Safety, Security & Communications
- Tour of research lab and research activity with [REDACTED], Educator
- Meeting with Lamont-Doherty High School Interns and lecture from [REDACTED], Associate Research Professor

Friday, August 10 – Finalize and Practice Presentation

- Met with [REDACTED], General Manager to discuss room set up and specifications
- Met with [REDACTED], Audio Visual Manager to discuss all A/V needs

Friday, August 17 – Final Presentation

Annual Report: Youth Internships - Engineering the Next Generation

State Submission Annual Reporting Period: **October 2017 - September 2018**

- Information Session Date: **January 10, 2018**
- Application Deadline: **April 29, 2018**

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 Engineering the Next Generation (ENG) Program is a 6-week long intensive summer program at Columbia Engineering for academically competitive high school students. Rising high school seniors are placed in engineering labs, matched with 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. The program admits from five partner schools; Columbia Secondary School, The High School for Math, Science and Engineering (HSMSE) at the City College of New York, Marble Hill HS for International Studies, 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.		10467	Bronx Center for Science & Math
2.		10027	Columbia Secondary School
3.		10457	ELLIS Preparatory Academy
4.		10451	ELLIS Preparatory Academy
5.		11417	Columbia Secondary School
6.		11364	High School for Math Science and Engineering (HSMSE) at the City College of New York
7.		10463	ELLIS Preparatory Academy
8.		10462	High School for Math Science and Engineering (HSMSE) at the City College of New York
9.		10033	Columbia Secondary School
10.		10453	Columbia Secondary School
11.		10473	ELLIS Preparatory Academy
12.		10454	ELLIS Preparatory Academy
13.		10456	ELLIS Preparatory Academy
14.		11375	High School for Math Science and Engineering (HSMSE) at the City College of New York

Additional Supporting Documentation

- ENG Outreach and Application Process
- ENG 2018 Application Packet



ENG Program: Summer Research for High School Students at Columbia University Fu Foundation School of Engineering & Applied Science

Program Description

The ENG Program is a 6-week academic summer program at Columbia Engineering for academically competitive high school students. Rising high school seniors will be placed in engineering labs, matched with research mentors, and supervised by faculty members. This program has rigorous demands and will prepare students for the caliber of work expected of college students.

Program components include research, mentoring, college preparation, presentation skills, as well as technical, academic, and professional development workshops. Students will also learn time management, communication, and teamwork skills, which are all increasingly important for success in STEM fields and in higher education. Possible extensions of the program include continuing research throughout the academic year, publication in the Columbia Undergraduate Science Journal, and a letter of recommendation from the research lab's supervising professor and Principal Investigator.

Eligibility

Students should be current high school juniors to apply. While there is no minimum GPA, students should excel academically overall. Ideally, applicants will have demonstrated interest in STEM subjects, for example by seeking out advanced classes and extra-curricular activities.

Students must be free for the entire duration of the program. Students are required to present their project at the research master class, write a summary of the research project, and prepare a poster to present at the undergraduate symposium in August 2018. The program also requires students to attend a lab safety training as well as relevant workshops. Students will be awarded a stipend upon successful completion of the program.

Dates and Duration

The program runs from Tuesday July 5th through Friday August 12, 2016. Students will work about 35 hours a week, Monday – Friday from 9am – 5pm.

Application Deadline:

Please print out all materials and submit them to your teacher by April 29th 2018 by 5:00pm EST.



Application Checklist

Please use the following checklist to verify that your application is complete prior to submitting your application. All materials, including the letter of recommendation, are due on **April 29th**.

- **Personal Information Form**
 - Student and parent signatures are required.
- **Two (2) Essay Responses**
 - Essay responses should be written/typed on a separate document attached to the completed application. Please label each page with the question you are answering.
- **Extracurricular Responses**
 - Please describe up to three (3) of your most important extracurricular activities on the form included.
- **Recommendation Letter**
 - Please ask either your current science or math teacher to submit a recommendation on your behalf. **Important:** Please notify your teacher well in advance of the April 29th deadline to give your teacher ample time to prepare a letter of recommendation.
 - Teachers: Please email your letters of recommendation directly to [REDACTED], Director of Outreach Programs at Columbia Engineering at [REDACTED].
- **High School Transcript**



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The Fu Foundation School of Engineering and Applied Science

Essays

Please limit your responses to 300 words or less. 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. Submit your responses in a separate document along with the rest of your application, and clearly label each page with the question that you are answering.

- 1) What do you think has been the greatest scientific or technological discovery in the past 50 years? Why?
- 2) Describe a social, personal, or academic challenge that you have faced and how you overcame it.
- 3) Imagine that you are a product engineer for a rehabilitation clinic. Many of the clinic’s patients suffer from arthritis and have difficulty doing daily tasks with their hands, such as turning a doorknob, typing on a keyboard, or opening containers. The clinic has asked you to design a product that will allow arthritis patients to do some of these tasks more easily.

Describe your plan on how you will design your solution from start to finish. To help you get started, here are a couple questions to help you begin your design plan:

- Arthritis makes numerous daily activities difficult. Which specific activity will your product make easier for arthritis patients, and why did you choose this activity?
- How will you brainstorm possible solutions?
- How will you make your product economically feasible?
- How will you test your product?

Please note that we are NOT looking for a specific solution, and you do not need to design or sketch a possible solution unless you wish. We are more interested in your approach to problem solving and design planning rather than a “correct” solution.