YES!
Youth Engagement through Science
2015 Application Form
Washington, DC area students saying YES! to science
The National Museum of Natural History is currently accepting applications for its 2015 internship program, Youth Engagement through Science (YES!).

**About the Program**

**Description**
The National Museum of Natural History is committed to increasing opportunities for racially/ethnically diverse students interested in science and cultural studies. This program facilitates the development of science skills necessary to be competitive in today’s knowledge-based society. Rising 10th, 11th & 12th grade students from the Washington, DC, area with an interest or aptitude in science are invited to apply for this unique, paid internship. The goals are to help participants to build their science and communication skills, explore careers in science by working side by side with scientists, and to prepare for the next step in their education through a college preparation course.

**Program Components: 12 week program**

**Summer Session:** 7 weeks, 5 days per week. June 29 – August 14, 2015, 9:00 am – 4:00 pm
Interns pursue meaningful research projects with Smithsonian research scientists and science staff in the biological, geological, and anthropological disciplines. Interns also receive training and mentoring in communication skills and in communicating about science, and they prepare and present an activity for visitors to the National Museum of Natural History.

**Fall Session:** 5 weeks, Saturdays only. September 12 – October 10, 2015, 9:00 am – 4:00 pm
Students engage in college preparation activities and complete a community outreach project.

**Applying for the Program**

**Eligibility**
- Applicants must be current freshmen, sophomores or juniors in high school.
- Applicants must be US citizens or US permanent residents.
- Applicants must live in the Washington, DC, metropolitan region (DC, MD or VA).
- Participants are required to participate in both the summer and fall sessions of the program.
- Must have an interest in natural sciences, cultural studies, planetary sciences, and horticulture.

**Application Procedure**
Submit a complete application package:
- Completed application form (attached)
- Essays (see application)
- Copy of high school transcript
- Application Survey
- Two letters of recommendation (forms attached)

There are two ways to submit the application:
1) Email the application package to: yesprogram@si.edu.
2) Mail the application package to:
   **Attn:** YES! Program
   Smithsonian Institution-NMNH
   Office of Education & Outreach
   PO Box 37012 MRC 158
   Washington, DC 20013

**Application Deadline**
Applications must be submitted no later than January 30, 2015. Incomplete applications will not be accepted.

**Questions?**
If you have any questions about this program or application procedures, please contact: Youth Programs Staff at yesprogram@si.edu or (202) 633-4588.
2015 Application Form
Youth Engagement through Science (YES!)

In addition to this form, all applicants must include essays, two letters of recommendation and transcript.

Applicant Full Name: ________________________________________________________ Date of Birth: _____________

Address: _____________________________________________________________________________________________

City: ________________________________________________ State: ___________ Zip Code:___________________

Phone Number:_______________________________ Email: ________________________________________________

Sex:    Male              Female                            Ethnicity (Optional):  ____________________________

Name of School:  ______________________________________________ Grade/Y ear: ____________________________

Parent/Guardian’s Name(s)  ____________________________________________________________________________

Parent/Guardian’s Phone Numbers: _______________________________(h)  ________________________________(w)

I am a US Citizen or US Permanent Resident             Yes                     No                  Other             _____________________

Required Essays:

Required Essay
Directions: Please respond to BOTH of the following questions below. Essay must be typed and 500 words (minimum) each.

1. Why are you interested in science and what does it mean to you?
2. Please elaborate on your project field preferences (e.g. Why did you choose those options?) What do you wish to learn more about in these fields?

Required Short Essays
Directions: Please select THREE of the following questions below. All essays must be typed and 150 words or less for each question.

1. What has challenged you the most in life so far and how did you overcome it?
2. Indicate your strongest positive characteristics and your areas for improvement. Please explain each.
3. Describe the world you come from; for example, your family, school, community, city, or town. How has this world shaped your dreams and aspirations?
4. We know you lead a busy life, full of activities, many of which are required of you. Tell us about something you do simply for the pleasure of it. Such as a hobby or community service and why?
5. Communicating about science is an important aspect of our program. Tell us about an experience where you have communicated to your friends and community about your favorite science topic.

Submission Packet Checklist:

____  Completed application form                       ____  Application Survey
____  Essay                                                               ____  Two Letters of Recommendation
____  Transcript

I certify that the information given above is true:

Applicants Signature  __________________________________________________________

Parent/Guardian Signature  _____________________________________________________
Application Survey

- Are you in a magnet or science-related track program at school?
  - Yes [ ] No [ ]

- Have you ever completed an internship?
  - Yes [ ] No [ ]

- Will you be the first in your family to go to college? Please check Yes or No. If no, please specify who attended college.
  - Yes [ ] No [ ]

- What are you interested in studying in college?
  -

- Will you be available for the entire summer internship? If not, please list dates of availability?
  - Yes [ ] No [ ]

- Will you be available full time (40 hours per week)?
  - Yes [ ] No [ ]

- Are you involved in any extracurricular activities (band, sports, part-time job) that may interfere with your full participation in the fall session, please list reason.
  - Yes [ ] No [ ]

- Do you have previous experience using microscopes?
  - Yes [ ] No [ ]

- Are you willing and able to work in an outdoor setting (i.e. Gardening, outdoor exhibits)?
  - Yes [ ] No [ ]

- Are you willing and able to work with live animals including insects?
  - Yes [ ] No [ ]

- Are you willing and able to work with dead animal specimens including insects?
  - Yes [ ] No [ ]

- Some projects demand absolute care and attention especially when handling fragile specimens. Please rate your comfortability working with and handling fragile specimens.

- Do you want to be in the medical field (pediatrician, physician, nurse, etc.) when you grow up?
  - Yes [ ] No [ ]

- Do you want to be in the engineering field when you grow up?
  - Yes [ ] No [ ]

- Please select ONLY TWO site locations and select ONLY ONE project (if applicable), please refer to our website for more information regarding projects.

  - National Museum of Natural History [ ]
    - Select your top project:
      - Top Choice: _____________________________

  - Smithsonian Gardens [ ]

  - National Air and Space Museum [ ]

  - National Zoological Park [ ]
    (Disclaimer: Students MUST be at least 16 years of age in order to be considered for an internship at the National Zoo)
    - Select your top project:
      - Top Choice: _____________________________
Project List

Disclaimer: Projects are subject to availability, change, and are not guaranteed. Please visit our website for more up to date information

National Museum of Natural History

Botany
- Interns will gain introductory skills in examining botanic objects in the museum collection. The intern will learn the basics of natural history research, museum exhibit collections, sample preservation, analysis, and organization and identification of specimens. The intern will learn the methods of archival storage in the botany department and how the present collections are being adapted.
  Website: http://botany.si.edu/

Cultural Anthropology
- Anthropology is the study of human beings and societies in the past and present. The research conducted by the Department of Anthropology staff covers a wide range of topics and areas of the world. Some of the research topics include human-environmental interactions, population migration, origins of domestication, and linguistics. The intern will learn the basics of anthropological research, how museum collections are catalogued, conserved and studied.
  Website: http://anthropology.si.edu/index.html

Entomology
- With over 35 million specimens housed in more than 132,354 drawers, 33,000 jars or vials, and 23,000 slides in more than 5,200 cabinets, the National Insect Collection is one of the largest entomological collections in the world. Interns will learn the basics of natural history research, specimen identification, pinning and labeling, and live collection management.
  Website: http://entomology.si.edu/

Insect Zoo & Butterfly Pavilion
- This hands-on project will give the student the unique opportunity to support the Insect Zoo & Butterfly Pavilion staff in many aspects of the exhibit’s daily operations. The intern will assist with plant care and animal husbandry in the lab and exhibit, interact with museum visitors, maintain clean conditions in the exhibits and lab and work with staff to ensure butterfly containment.
  Website: http://www.mnh.si.edu/education/exhibitions/insectzoo.html

Invertebrate Zoology
- In this department, scientific research is conducted by research biologists, curators, and specialists on specimens in our collections and performed in the Museum’s laboratories and collections facilities. The intern will learn the basics of natural history research, museum collections, and gain introductory skills in examining invertebrate specimens.
  Website: http://invertebrates.si.edu/

Mineral Science
- Staffs in our Mineral Sciences department study the origin and evolution of the Earth and Solar System, Earth processes and their products, and the effects of geologic and meteoric phenomena on Earth’s atmosphere and biosphere. The department has in their care the premier research collections of minerals, meteorites, rocks, ores, and volcano data/images. Interns will learn the basics of scientific research in a natural history museum, museum collections, and gain introductory skills in examining minerals.
  Website: http://mineralsciences.si.edu/

Paleobiology
- The department’s mission is to increase public and scientific understanding of the biological and environmental history of Earth through the study of fossil animals, plants, and protists. In addition to performing scientific research, the department assembles and curates fossil collections that are studied by scientists from around the country and the world. The interns will learn the basics in fossil collection management: identification, labeling, and preserving specimens.
  Website: http://paleobiology.si.edu/

Vertebrate Zoology
- This department houses a world-class collection of preserved specimens ranging from mammals to birds. Divisional collection management staff preserves, conserve, and document specimens to ensure their accessibility to present and future research activities. Interns will learn the basics of natural history research and collection management including: assisting with specimen organization, identification, cataloging, updating and labeling of specimens. Project topics: Mammals or Birds
  Website: http://vertebrates.si.edu/

National Air and Space Museum
- Interns will gain introductory skills in physics, geology, or space science. Interns will learn under the guidance of research scientist and educators working in the Center for Planetary and Earth Studies (CEPS) which performs original research and outreach activities on topics covering planetary science, terrestrial geophysics, and the remote sensing of environmental change.
  Website: http://airandspace.si.edu/research/earth-and-planetary/
Project List

Disclaimer: Projects are subject to availability, change, and are not guaranteed. Please visit our website for more up to date information

National Zoological Park

Disclaimer: All applicants must be 16 years or older prior to June 15, 2015 to be considered for the National Zoo projects.

Amazonia/Animal Hospital
• The intern will have the opportunity to be in a tropical rainforest environment without leaving D.C. Interns will get a unique experience working with many species of fish, amphibians, reptiles, mammals, and bird species. The intern will get hands on experience with cleaning, food preparation, and opportunities for public education. In addition, the intern will have the opportunity to gain experience shadowing at the Zoo’s Animal Hospital. Interns will observe veterinarian procedures of Zoo animals including annual check-ups.
Website: http://nationalzoo.si.edu/Animals/Amazonia/Exhibit/

American Trails
• A recently renovated space, you experience the wander through landscaped trails and discover unparalleled opportunities to come face-to-face with California sea lions, watch playful beavers and otters, admire the classic beauty of eagles and wolves. The intern will get hands on experience with cleaning; food preparation; some basic animal training techniques; and opportunities for public education.
Website: http://nationalzoo.si.edu/Animals/AmericanTrail/

Asia Trail
• One of the newest areas built at the Zoo back in 2006, Asia Trail will give the intern a broad spectrum of Asian species to work with. The intern will get hands on experience with cleaning; food preparation; some basic animal training techniques; and opportunities for public education. The intern will also have the opportunity to learn about research data collection and behavior research topics.
Website: http://nationalzoo.si.edu/Animals/AsiaTrail/

Bird House
• The widest varieties of birds at the zoo live indoors at the Bird House where a series of smaller exhibits encircle a large indoor jungle complete with free-flying tropical birds. The intern will get hands on experience with cleaning, food preparation, and opportunities for public education.
Website: http://nationalzoo.si.edu/Animals/Birds/Exhibit/bird_house.cfm

Lions & Tigers
• The National Zoo’s lions and tigers brings up close and personal in a fun and exciting learning adventure. The intern will get hands on experience with cleaning, food preparation, and opportunities for public education. The intern will gain enrichment through preparation and behavior watches as well as learning about the maintenance of the animals and its daily operations.
Website: http://nationalzoo.si.edu/Animals/GreatCats/

Reptiles
• At the Zoo’s Reptile Discovery Center, you can experience the wonder and excitement of the reptilian and amphibian world. The intern will learn about these fascinating animals and develop a greater understanding of these unique and important species. The intern will assist Animal Keepers with daily cleaning feeding with the possibility of hands on experience working with some of the animals at RDC.
Website: http://nationalzoo.si.edu/Animals/ReptilesAmphibians/Exhibit/default.cfm

Small Mammals
• In the Small Mammal House, you can gaze at the sprightly grace of the golden lion tamarin, the uncanny armor of the three-banded armadillo, and the fascinating quills of the prehensile-tailed porcupine. Naked mole-rats are a favorite, and tree shrews are often on the go. The intern will get hands on experience with cleaning; food preparation; public speaking opportunities during scheduled animal demonstrations.
Website: http://nationalzoo.si.edu/Animals/SmallMammals/smhouse.cfm

Smithsonian Gardens
• The Smithsonian Gardens provides an exceptionally well-rounded array of experiences while transforming its gardens into an interactive and engaging learning environment. Internships include regular horticulture maintenance duties such as planting, watering, weeding, pruning and record-keeping, analyzing ecosystems and public programming. Interns will learn about wildlife interactions with the plants in the gardens and learn how to enter data into a web based citizen scientist program.
Website: http://www.gardens.si.edu/
In order to better assess whether this student has the potential for success with our program and to assist us in determining his/her candidacy. Please fill out this form as a request for a recommendation. All information that you provide to YES! will be kept in strict confidence. Please return recommendation in a sealed envelope to student or our return address below. We thank you for your cooperation and time.

Attn: YES! Program
Smithsonian Institution-NMNH
Office of Education & Outreach
PO Box 37012 MRC 158
Washington DC 20013

• Your information:

  Name ______________________________                Organization ____________________________________
  E-mail ______________________________   Phone number ____________________________________
  Students Name ______________________________       Relationship to Student ____________________________________

• Please evaluate the applicant as follows:

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Average</th>
<th>Below Average</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disciplined Work Habit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability To Work With Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Maturity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect shown to faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect shown to peers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness to New Experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of humor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive personality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following questions are to be answered by the person recommending the applicant. Please attach a typed separate sheet of paper answering the following questions.

1. How long have you known the applicant?
2. Do you have concerns about the ability or motivation of the applicant? If so, please explain why.
3. Please describe the applicant’s ability to communicate effectively with others, both orally and written.
4. What characterisitcs both personal and academic will make this candidate stand out?
5. What would you consider to be the applicants strength and weaknesses?
6. Does the applicant have any limitations that may require special consideration to help his/her adjustment to the program?
7. We would appreciate any additional comments or observations (attach seperate sheet).