An After School Citizen Science Program
for Middle & High School Students (minimum age: 12)
Get Close! Dig In! Get Wet! Get Real! Go Wild!
Apply now! Free!

Engage in Real Research, Adventure, Exploration!
Where: Case Western Reserve University-The Leonard Gelfand STEM Center
Move Your Research Findings to Citizen Action!  
Make a Difference!

Begin Your Quest: Tuesday, July 27, 2021  
Environmental Hero Summer Research & Orientation  
Week One: Tuesday, July 27 - Friday, July 30 and  
Week Two: Monday, Aug. 2 – Friday, Aug. 6, 2021  
9:30a.m. – 3:30p.m.

Meet Wednesdays After School 4:30p.m. – 6:30p.m.  
Throughout the Year  
Beginning Wednesday, September 15, 2021  
Apply now for this FREE After School Program  
Completed Applications Due June 18, 2021  
Arrangements will be made to interview eligible applicants.
Have you got what it takes to be an Environmental Hero?

The Leonard Gelfand STEM Center at Case Western Reserve University will use the necessary tools and resources to build a skilled corps of 12-19 year old youth to effectively demonstrate the ability to understand complex environmental issues through hands on science and to use that understanding to contribute to the body of research and to support efforts to preserve and protect our own local environmental assets.

On becoming a

Explore and learn about the water bodies around the CWRU campus
Step into the past to understand the present
Learn from experts
Meet representatives of stakeholder organizations: e.g. Regional Sewer District
Develop your research question around the Doan Brook watershed
Make predictions
Build your observation skills
Conduct Field Research with research quality tools: electronic probeware, field equipment
Get your hands in it, on it, around it: dig, dip, net, examine: plants, critters, water
Use GPS tools, field guides, maps
Capture the moments: photograph it, video tape it
Put all the research data together, analyze it, present results and recommendations
Engage in Environmental Advocacy
Make New Friends
Make a Difference

✅ Check Here:
___I CAN DO THIS! AND, I CAN BE AN ENVIRONMENTAL HERO!
The Leonard Gelfand STEM Center-Case Western Reserve University present **Environmental Heroes**, an engaging after school citizen science program for middle and high school aged youth (minimum age 12) interested in science and exploration. Inspired by the work of individuals and groups around the region and around the country with a commitment to protecting our environment and preserving and conserving parks and natural places, the Environmental Heroes Program was born.

Youth involved will conduct real science informed by researchers and educators invested in efforts to understand, restore and protect habitats in the Doan Brook watershed. Select youth will: conduct field research; collect and analyze data; and present their findings beginning July 27, 2021 weekdays through August 6, 2021. Each day, these citizen scientists will trek outside to develop and practice their observational skills, learn about habitats, riparian areas, and more. Methods of research will be introduced.

Environmental Heroes will be encouraged to engage in environmental advocacy, communicating with decision makers locally, around the State, and around the nation about key environmental concerns.
Application Statement of Understanding

Please read this section carefully and, if agree, sign in the space provided below.

Commitment: Participants are asked to make a two year commitment to the research and will be expected to complete assignments outside of the weekly after school sessions. Those assignments will be related to the research or related to preparation for presentations and/or special programs. Required reading: a weekly memo summarizing the week’s work and plans for upcoming weeks. Note: As individuals move through high school, higher level research activities may be assigned.

Environmental Heroes should be in good health and physically fit with an eagerness and will to hike to research sites. At minimum, applicants should not be afraid of water, insects, animals, plants, getting wet and dirty, or the out of doors. If mom, dad, grandma, or anyone else is forcing you to enlist, this is not the program for you! Participants must demonstrate that they are self-motivated to conduct the research.

Throughout the program, regular communication will be exchanged weekly via e-mail and/or other secured electronic resources (e.g. designated web site, conference calls). Participants are expected to respond to communications and exchange information among participants around this program and the research.

Skills in using Microsoft Office software packages or Google Docs will be helpful in compiling data, building research plans, or preparing for presentations. Internet and library research skills are welcomed.

Some activities will be photographed or filmed and used in presentations and promotional materials for the Gelfand STEM Center- Case Western Reserve University.

Environmental Heroes will be Ambassadors of the program, disseminating information and experiences to a variety of audiences.

It is the policy of the Gelfand STEM Center and Case Western Reserve University not to discriminate on the basis of race, color, age, sexual preference, political affiliation, religion, marital status, national origin, handicap or disability in its programs and activities. No person shall be denied consideration solely because of any impairment that is unrelated to the ability to engage in activities involved in the program for which application is made.

The unlawful distribution, manufacture, possession, sale, dispensation, or use of illicit drugs and alcohol while engaged in the Environmental Heroes program is strictly prohibited. The illegal use of drugs and alcohol is inconsistent with the behavior expected of Environmental Heroes.

Possessing weapons of any kind (guns, martial arts weaponry, etc.) or explosives (including fireworks) while participating in the program is cause for immediate dismissal.

Anyone who engages in illegal behavior that is in violation of US Federal, State or Local laws of any kind while in this program shall be held accountable for their actions and potentially dismissed from the program.
The Gelfand STEM Center and Case Western Reserve University reserve the rights to change the scope of the program, including but not limited to the research site(s), the number of participants, and the program’s timeline.

It is understood that individuals participate in many activities both in and outside of a traditional or nontraditional school setting. In considering this program, applicants are asked to honor the stated commitment, not over commit themselves to other programs, but to carefully choose how they prefer their out of school time be spent. Please do not apply if you cannot participate regularly.

For more information, please call Kathryn Kwiatkowski, Director, Math and Science Programs, The Leonard Gelfand STEM Center, Case Western Reserve University, 216-368-5075, or e-mail: kmk21@case.edu. Thank you!

I_____________________________________have read the above and understand my responsibilities if selected as an Environmental Hero participant. I agree to contribute as a member of the overall team which includes fellow Environmental Heroes, staff of Case Western Reserve University, and area professionals and experts.

______________________________________________________           __________
Signature of Applicant                                           Date

______________________________________________________           __________
Signature of Parent/Guardian                                     Date

Although an interest in science is most valuable for this program, we are also looking for students with diverse interests that may include but not be limited to art, history, political science, and technology. Heroes will work in teams and must demonstrate their ability to get along with and work with others safely and effectively.
Application Instructions

All applicants must complete the application material described below and submit the completed documents by June 18, 2021, to:

K. Kwiatkowski  
The Leonard Gelfand STEM Center  
Case Western Reserve University  
Guilford House 412  
10900 Euclid Avenue  
Cleveland, Ohio 44106-7158  
Electronic submissions are also acceptable:  
e-mail kmk21@case.edu or fax: 216-368-5465

Interviews will be arranged for eligible applicants. Eight to ten new applicants will be selected for the 2021-2022 period.

Applications must be completed in blue or black pen or typed. Please print clearly.

Two short essays: On separate sheets of paper, and included in the application packet, please submit two typed 300-350 word essays in Times New Roman or Times font no smaller than a font size of twelve (12). Please indicate the number of words at the bottom of each essay page. The topics for each essay are as follows:

1. Describe any area of science, technology, engineering, and/or math that you find exciting. Please be sure to tell why it is exciting or interesting.

2. Because Environmental Heroes generally have a variety of interests, hobbies, skills, and experiences in and out of a school setting, please share what you would be able to contribute to the program.

Signed Hold Harmless Agreement  
Signed and Completed Application Statement of Understanding  
List of all extracurricular activities and leadership positions.
ENVIRONMENTAL HEROES APPLICATION 2021-2022
(Please Print)

Name: ____________________________ ____________________________
First Name MI. Last Name

Home Address: ___________________________________________________________________
P.O. Box and/or Street Number and Street Name

City __________________________ State ______________ Zip ________________

Home Phone: ___________________________; Cell Phone: ___________________________
(Area Code and number)

Name of School & Address: ____________________________

School District: __________________________________________

Parent Daytime Phone and/or Cell Phone Number: ____________________________
(Area Code and number)

Date of Birth: __________________________

Applicant E-mail address: __________________________

Parent or Guardian’s E-mail address: __________________________

Parent/Guardian(1):
First Name MI Last Name

Parent/Guardian (2):
First Name MI Last Name

Emergency Contact other than Parent/Guardians
First Name MI Last Name

Please indicate relationship (brother, sister, grandmother, etc.)

Phone Number: __________________________
(Area Code and number)

I certify that (name of youth) ____________________________ is in relatively good health and able to participate fully in program activities:

Signature of Parent or Guardian Date
Environmental Heroes Interest Questionnaire

The Environmental Heroes program invites middle and high school level students (minimum age: 12) with diverse interests to participate in this citizen science program. Please indicate which items in the list below are in your top ten areas of interest. Please rank them in your order of preference from 1-10, with 1 being the most interesting, 10 not a top interest. Your rankings will not determine whether or not you participate. It is only one way of getting to know the diverse interests of participants. You may add any other interest(s) not listed, but you believe valuable, on the blank lines below. Thank you!

__Art__ __Geography__
__Astronomy__ __Geology__
__Biology__ __Journalism__
__Chemistry__ __Mathematics__
__Computer Science__ __Medicine__
__Construction Trades__ __Music__
__Engineering__ __Social Sciences__
__Exploration__ __Writing__

Other key interests:
________________
________________
________________
________________
________________
________________
List of All Extracurricular Activities and Leadership Positions

Student’s Name: ________________________________

Last       First       Middle

School Or Organization Name: ________________________________

Activity or Leadership Position & Description AND
Duration of Activity or Service (e.g. weekly, Jan 2019-present):

Volunteer _____ Appointed _____ Elected_____

*************************************************************************

School Or Organization Name: ________________________________

Activity or Leadership Position & Description:

Volunteer _____ Appointed _____ Elected_____

*************************************************************************

School Or Organization Name: ________________________________

Activity or Leadership Position & Description AND
Duration of Activity or Service (e.g. weekly, Jan 2017-June 2018):

Volunteer _____ Appointed _____ Elected_____

*************************************************************************

School Or Organization Name: ________________________________

Activity or Leadership Position & Description AND
Duration of Activity or Service (e.g. weekly, Jan 2017-June 2017):

Volunteer _____ Appointed _____ Elected_____

*************************************************************************
### List of All Extracurricular Activities and Leadership Positions

**School Or Organization Name:**

**Activity or Leadership Position & Description AND**

**Duration of Activity or Service (e.g. weekly, Jan 2017-June 2017):**

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**School Or Organization Name:**

**Activity or Leadership Position & Description AND**

**Duration of Activity or Service (e.g. weekly, Jan 2017-June 2017):**

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**School Or Organization Name:**

**Activity or Leadership Position & Description AND**

**Duration of Activity or Service (e.g. weekly, Jan 2016-June 2018):**

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These pages may be duplicated if necessary.
Case Western Reserve University
Hold Harmless Agreement and Release

I, ____________________________, certify that I am the parent and/or legal guardian of (Please print name of parent/guardian) ____________________________ who is registered to participate in the following activity: Environmental Heroes, offered by the Leonard Gelfand STEM Center - Case Western Reserve University. This after school program begins Wednesday, September 15, 2021, with required pre-program weeks of research preparation and orientation, Tuesday, July 27-30 and August 2-August 6, 2021.

I declare and recognize that it is in the above named minor’s best interest, as well as that of other participants, to follow the suggestions, guidelines, and/or rules of the program and the program leaders, coordinators and/or supervisors and that my participation in this activity is entirely voluntary or is at the direction or request of persons or entities not associated with Case Western Reserve University.

I understand that participating in this activity may involve exposure to risks, including the loss of life, serious loss of limb, or loss of property. Also, I understand that the consumption of alcohol and/or use of drugs are strictly prohibited and could result in the above named minor’s dismissal from further participation in the program. If I have any questions about the nature of the program, its risks or hazards, I have contacted the activity’s coordinator and/or supervisors and have discussed those questions with him/her to my satisfaction.

I understand that any Case Western Reserve University personnel or agents also participating in this activity are not necessarily medically trained to care for any physical or medical problems that may occur during this experience. I further understand that Case Western Reserve University does not carry medical or liability insurance for the above named minor while he/she is participating in this activity. By placing my signature below, I acknowledge to Case Western Reserve University that I have adequate medical and hospitalization insurance for any injuries that the above named minor may incur as a result of participating in this activity.

NOW, THEREFORE, in consideration for the above named minor’s participation in this activity, agree to hold the supervisor(s), coordinator(s) of this activity, Case Western Reserve University, its Board of Trustees, agents, officers, employees, and student or adult volunteers harmless for any and all direct, indirect, special or consequential damages, or costs, legal or otherwise, which the above named minor may incur as a result of his/her participation in this activity(ies), even if due to the negligence of Case Western Reserve University or any person serving in the above identified capacities.

I have read the above terms of this Agreement/Release, and I understand and voluntarily agree to the terms and conditions. This Agreement/Release shall be binding upon the heirs, administrators, executors, and assigns of the undersigned. I further agree to indemnify Case Western Reserve University, its agents, officers, and employees against any action brought against Case Western Reserve University by the above named participant, including, but not limited to an action brought by him or her upon reaching the age of majority. I warrant that I am authorized to execute this Agreement and Release on behalf of the above named minor. All participants must sign below. If participant is under 18 years of age, a parent signature is also required.

Signature of Participant_________________________ Date:____________________

Signature of Parent/Guardian_________________________ Date:__________________

Address: __________________________________________
ENVIRONMENTAL HEROES 2021-2022

Emergency Medical Authorization Form

PURPOSE: To enable parents and guardians to authorize the provision of emergency treatment for children who become ill or injured while participating in Environmental Heroes 2021-2022 when parents or guardians cannot be reached.

PLEASE COMPLETE ALL

Participant Name____________________________________
Address ____________________________________________
____________________________________________________
Home Phone ____________________________
Cell Phone ____________________________
Birth Date ____________________________

RESIDENTIAL PARENT OR GUARDIAN

Mother’s Name ____________________________ Daytime Phone ________________
Father’s Name ____________________________ Daytime Phone ________________
Legal Guardian or Other’s Name ____________________________
Daytime Phone ____________________________

Name of Relative or Childcare Provider:

__________________________________________ Relationship ____________________________
Address ____________________________ Phone ____________________________
PLEASE COMPLETE ALL
Part I or Part II MUST BE COMPLETED

PART I – TO GRANT CONSENT

I hereby give consent for the following medical care providers and local hospital to be called:

Doctor _______________________________ Phone _______________________________

Dentist _______________________________ Phone _______________________________

Medical Specialist _____________________ Phone _______________________________

Local Hospital _______________________ Phone _______________________________

Emergency Room

In the event reasonable attempts to contact me have been unsuccessful, I hereby give my consent for

(1) the administration of any treatment deemed necessary by above named doctor, or in the
event that the designated preferred practitioner is not available, by another licensed physician
or dentist; and

(2) the transfer of the child to any hospital reasonably accessible.

This authorization does not cover major surgery unless the medical opinions of two other licensed
physicians or dentists, concurring in the necessity for such surgery, are obtained prior to the
performance of such surgery.

Facts concerning the child's medical history, including allergies, medications being taken, and any
physical impairments to which a physician should be alerted:

____________________________________________________________________________

____________________________________________________________________________

____________________________________________________________________________

Date __________________

Signature of Parent or Guardian ________________________________

Address

____________________________________________________________________________
PART II – REFUSAL TO CONSENT (Do not complete if you completed Part I)*

I do not give my consent for emergency medical treatment of my child. In the event of illness or injury requiring emergency treatment, I wish no action be taken.

Date ____________________  
Signature of Parent or Guardian ________________________________  

Address

__________________________________________________________

__________________________________________________________

*Note: Case or the Metroparks may exercise the right to refuse to accept a student whose parents have not given consent for medical treatment.
Orientation Week One: Tuesday, July 27 – Friday, July 30 and Week Two: Monday, August 2 – Friday, August 6, 2021, 9:30a.m. – 3:30p.m.

After School: Wednesdays Beginning September 15, 2021

To fully experience this adventure, we hope and expect that participants will engage in all of the planned activities. Should an individual’s ability to participate in specific activities be limited due to health or religious reasons, please advise staff as soon as possible.

Program Consent: This after school experience is entirely voluntary. Participants will be asked to work in teams and are asked to accept responsibility for sharing in the work assigned to a team. It is hoped that working together will result in successfully accomplishing the research and reporting tasks. To ensure that each participant has a positive experience, each participant is asked to agree to abide by a number of rules and codes of conduct.

Honor Code:

The honor code establishes standards and expectations for student behavior and reflects the commitment to have a safe and enjoyable learning experience.

In order to create a safe and successful experience, I agree to:

➢ Always act with honesty and personal integrity
➢ Always treat all other participants, staff, experts, campus community members, and program guests with respect, regardless of their age, gender, ability, religion, race, or sexual orientation
➢ Always treat all facilities and property with respect and care
➢ Always observe all program rules and cooperate with staff

The program staff agrees to honor this code, too!

Director: __________________________________________________
Kathryn M. Kwiatkowski, Date:____________________

Participant Name _____________________________________________
Please print: First Name, Middle Initial, Last Name

Participant Signature__________________________________________Date:_____

Parent or Guardian Signature____________________________________Date:_____
Your signature above indicates that you fully understand the Honor Code and pledge to uphold its principles to the best of your ability while a participant in the Environmental Heroes Program.
Environmental Heroes

General Behavior and Discipline Policies:

The goal of any program is to have fun and learn in a healthy and safe environment. In order to ensure each participant’s safety and enjoyment as much as is reasonably possible, we ask everyone to adhere to the following, on site and off site, while participating in program activities:

➢ Refrain from using foul, abusive, or offensive language at all times
➢ Keep cell phones, and other electronic devices off throughout the scheduled program unless otherwise instructed
➢ Refrain from carrying or using weapons of any kind, explosives (includes fireworks of any kind), illegal drugs or alcohol
➢ Refrain from treating other participants, staff, and/or guests rudely
➢ Fighting, assault, violence, and/or physical intimidation (bullying) will result in dismissal from the program.
➢ Tampering with fire equipment or theft of or causing damage to University property or the property of any of the sites visited will result in dismissal and financial penalty.
➢ To accomplish a variety of tasks during this program, students will be using computers with access to the internet. Participants are to refrain from mining for or navigating on sites identified as inappropriate for youth.

Participants will be warned about any infraction. Parents will be called for the most serious infractions.

Program Provisions:

Participants will be provided snacks during the after school program. Please advise camp staff of any food allergies or restrictions.

Participants are asked to dress appropriately for the weather. Should the weather be severe on days where outdoor events are scheduled, adjustments may be made in the schedule of events.

Parent or Guardian
Signature:________________________________Date:___________

I understand that photos will be taken of Environmental Heroes throughout the program period and that some of those photos will be placed on the University’s web site and used in future promotional materials.

Student
Signature:__________________________________________Date:____________

Parent or Guardian
Signature:________________________________Date:____________
Transportation Form

I give permission to my son/daughter or ward to travel via bus to various sites within the Doan Brook Watershed/Lake Erie Watershed for Environmental Heroes 2021-2022.

I give my son or daughter or ward permission to fully participate in these site visits ___Yes _____No (Please check one)

I hold harmless, release and discharge Case Western Reserve University, its trustees, officers, employees, and its partner institutions from and against any and all claims arising out of this experience.

I certify that I understand the terms and conditions of this release. I sign it of my own free will and that I have the full legal authority and capacity to execute this document. Thank you

Print name of participant       Print name of parent or guardian

Signature of Student           Signature of parent or guardian

Date                          Date

Please return this form to:
Kathryn Kwiatkowski
Guilford House, Suite 412
Leonard Gelfand STEM Center
Case Western Reserve University
10900 Euclid Avenue
Cleveland, OH 44106-7158
216-368-5075
Please return completed applications, by June 18, 2021 to:

Attn: K. Kwiatkowski  
Case Western Reserve University  
The Leonard Gelfand STEM Center  
Guilford House Suite 412  
10900 Euclid Avenue  
Cleveland, Ohio 44106-7158

Electronic submissions to: kmk21@case.edu or via fax: 216-368-5465

Participation in Environmental Heroes is voluntary and open to middle and high school aged students (minimum age 12) regardless of race, creed, or gender.

Space is limited. Each application request will be honored in the order received and with all qualifications met.

Please contact Kathryn Kwiatkowski at (216)368-5075, or e-mail: kmk21@case.edu for more information. All registrants will receive confirmation notices.

This form may be duplicated.
All Media Release and Clearance Form

I, ____________________________ give Case Western Reserve University, its assigns, licensees and representatives the worldwide, perpetual, and irrevocable right to create recordings of my image (including my picture, portrait or photograph), likeness, and/or voice (hereby referred to as “recordings”). I agree the recordings may take the form of photographs, films, video and audio tapes, CD-ROMs, DVDs, digital files, or any other media.

I further authorize Case Western Reserve to exhibit or distribute such recording in whole or in part without restrictions or limitation for any educational or promotional purpose that Case Western Reserve University and those acting pursuant to its authority deem appropriate.

I understand that once information and/or materials are released to the public information media – including but not limited to television, newspaper, magazine, radio and the Internet, Case Western Reserve no longer has control over their use.

I hereby release and discharge Case Western Reserve, as well as their trustees, officers, employees, and representatives from any and all claims and demands arising out of or in connection with the use of the recordings.

I further acknowledge that I will not be compensated for any uses made of the recordings. I also waive any rights of privacy in the recordings, including but not limited to any rights that might otherwise be protected by the Family Educational Rights and Privacy Act.

I have had opportunity to review and seek explanation of the provisions contained above, have carefully read and understand them, and agree to be bound by them. I voluntarily and irrevocably give my consent and agree to this Release and Waiver. I represent that am eighteen (18) years of age or older.

Printed Name ________________________________________________

Signature ____________________________________________________

Date _________________________________________________________

If subject is under the age of 18:

Legal guardian ________________________________________________

Media Relations representative/witness: ____________________________________________

Legal Approved 08.10.10