

## **Environmental Justice STEMM Leadership Development Program Application Form**

| STUDENT INFORMATION   |                            |  |
|---|----------------------------|--|
| Full Name:  |                            |  |
| Age: D0B:   | Grade Level:               | T-Shirt Size:                              |
| Gender: Male Female Other   | Preferred Pro              | onouns:                                    |
| Race/ Ethnicity (optional):  American Indian or Alaska Native Asian Black or African American Hispanic/Latino | ☐ White ☐ Two or mo        | waiian or Other Pacific Islander ore races |
| Club Location you Attend:  □ Forest Heights □ Pass Christian  | ☐ East Bilox ☐ D'Iberville |  |
| Address: State  |                            | Zip:                                       |
| PARENT/GUARDIAN INFORMATION:  |                            |  |
| Mother's Name:  | r's Name: Father's Name:   |  |
| Mother's Cellphone #: ( ) Fa  |                            |  |
| Relationship to Guardian:   | •                          |  |
| Parent/ Guardian Email Address:   |                            |  |
| Parent/ Guardian Address:   |                            |  |
| Parent/Guardian Signature   | S                          | tudent Signature                           |
| Date:/  | Date:                      | /  |

MISSISSIPPI GULF COAST

#### **Environmental Justice STEMM Leadership Academy**

**EJSLA** 



#### Program FAQ

#### What is the Environmental Justice STEMM Leadership Academy (EJSLA)?

Through the support of the National Academies of Sciences, Engineering, and Medicine (NASEM), this community-driven science education program will train 6th through 12th graders in the BGCGC after-school program in scientific inquiry and analysis, while also encouraging them to analyze historical, cultural, and political dimensions of regional public policies through an environmental justice lens. Students will be introduced to STEMM career tracks and acquire knowledge and skills through hands-on, citizen science projects that serve frontline communities in the region. The EJSLA has been made possible through a five-year NASEM grant to develop and evaluate a pilot program, which might be developed and implemented on a wider regional/national scale after the initial five-year grant period concludes.

#### When does the EJSLA happen?

Every Tuesday and Thursday from 4:00-6:00 am. We encourage all students enrolled in the EJSLA to come regularly and stay for as long as they can each Tuesday and Thursday. We have a lot of fun activities and experiments planned for this year! Students that are actively involved by attending 75% of their Academy days each day will also receive a stipend each semester they participate (Fall, Spring, Summer).

- \$200 for middle school students
- \$300 for high school students
- \$400 for graduating seniors

What are examples of things my child will do this year with the EJSLA?

Collect data in their community using real scientific equipment, climate change activities at the BGCGC, quest speakers, and field trips!

#### Research Study FAQ

## Why am I being asked to sign a permission form for my child to participate in a research study?

Because the Academy is funded for five years by NASEM, we are required to report how well the Academy is meeting the goals we designed for it. The best way to do that is by collecting student input based on how their attitudes towards STEMM fields are changing as a result of their experiences in EJSLA. In light of the fact that most students enrolled in the EJSLA are minors, we want to make sure you know about the study and are ok with your child/children participating in it. This study has been carefully reviewed and approved by the USM Institutional Review Board under protocol number 22-1642.

#### How will I know this is safe for my child?

Our proposed research study has been vetted by USM's Institutional Review Board for the safety of the minor participants. Part of this vetting process includes making sure that your child not be identifiable by name in any grant-related reports or publications. They will be given a pseudonym at the start of the study, and the personal information tied to that pseudonym will be kept in a locked file. This research is not about your specific child, but the evaluation of the EJSLA overall, so we will ensure that your child's identifying personal information is never shared beyond our research team.

#### What kind of data will you collect?

We will ask each enrolled student to take a pre- and post-survey in order to assess their interest, self confidence, and interest in STEMM careers at the beginning relative to the end of their time in the Academy. For annual grant reporting purposes, we will also give a shortened version of the survey periodically to see how their attitudes towards STEMM subjects are evolving over time.

#### What happens to the data?

We will analyze the EJSLA data as a whole to submit yearly reports to the NASEM to let them know how the EJSLA is doing. If the results suggest this Academy could provide a model for similar programs nationally, we might publish the results in a scholarly journal. It is important to note that any such published analysis would be based on the effectiveness of the EJSLA, not on progress made by individual students.

#### What happens if I want them to do it?

High student participation is critical for a successful study. For our study, your student's participation will ensure more accurate data collection and reporting to NASEM and research-based insight into best practices concerning student engagement and learning. Additionally, their participation has the ability to help them grow as leaders. impact their local community, teach them about STEMM job opportunities, and help them learn some fun STEMM skills and knowledge!

#### What happens if I don't want them to do it?

It's totally ok! Your child will still be treated the same as the other children, and they can still receive the stipend. We just won't use their data in our study.

#### MISSISSIPPI GULF COAST

## Environmental Justice STEMM Leadership Academy

**EJSLA** 



# Institutional Review Board Parental Consent Form

August 1, 2023

| Project Information  |   |                                 |  |  |
|--|---|---------------------------------|--|--|
| Project Title: Assessing Student Progress in an After-School Environmental Justice STEMM |   |                                 |  |  |
| Leadership Academy   |   |                                 |  |  |
| Protocol Number: 22-1642   |   |                                 |  |  |
| Principal Investigator: Rachel   | Phone: 228-214-3265                           | Email: rachel.gisewhite@usm.edu |  |  |
| Gisewhite  |   |                                 |  |  |
| College: Arts and Sciences   | School and Program: Center for STEM Education |                                 |  |  |

## **Research Description**

#### 1. Purpose:

Researchers for the Environmental Justice STEMM Leadership Academy (EJSLA) will collect data to determine how students progress through the Academy. We are interested in seeing how students develop with respect to their perceptions STEM fields and STEM careers, scientific literacy, and how students engage with their community around regional and global environmental justice issues. Our data is primarily going to be used to report back to our funding agency (National Academies of Sciences, Engineering, and Medicine), but we may also use the data to highlight the successes and challenges of the Academy in scholarly or academic publications.

#### 2. Description of Study:

Students will be asked to take a pre-test before beginning the Academy, a shortened version of the same test periodically throughout the Academy, and a post-test at the end of the Academy. Each survey should not take more than 20-30 minutes to complete. Any other data we collect will be from the exercises they submit on our Academy Canvas page and will require no additional effort from them beyond what they will typically be doing for the Academy. We may also occasionally write down notes about their experiences completing the STEM activities or our group conversations related to the STEM and environmental and social justice issues we're engaging in. Researchers can provide parents/guardians will our field notes or student exercises upon request.

#### 3. Benefits

If you give consent for your child to participate, the data we collect from their experiences and surveys will be used to inform other researchers, educators, and policy makers across the country,

which may provide opportunities to create similar experiences for other students and help the members of your community long-term.

#### 4. Risks

There are no known risks to participating in this study.

#### 5. Confidentiality:

All of the data we collect on students will be de-identified. This means that we will assign a pseudonym, or false name, to each student, and it will be used throughout their time in the Academy. Only the researchers will know which pseudonym belongs to each student. All papers including their real information will be locked in a cabinet and destroyed after the study. All electronic information including their real information will be on a password-protected computer and our password-protected Canvas that can only be accessed by the researchers.

#### 6. Alternative Procedures:

There are no alternative procedures.

#### 7. Participant's Assurance:

This project has been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, 601-266-5997.

Any questions about this research project should be directed to the Principal Investigator using the contact information provided above.

**Parental Consent Information** 

| Participants Name:  |   | Participant's Age:          |  |  |
|---|---|-----------------------------|--|--|
| Parent or Guardian's Name:  |   |                             |  |  |
| Person Soliciting Parental Consent: Rachel Gisewhite  |   |                             |  |  |
| Agreement to Allow Participation in In Research   |   |                             |  |  |
| I hereby consent to participate in this research. All research procedures and their purpose were explained to me, and I had the opportunity to ask questions about both the procedures and their purpose. I received information about all expected benefits, risks, inconveniences, or discomforts, and I had the opportunity to ask questions about them. I understand my participation in the project is completely voluntary and that I may withdraw from the project at any time without penalty, prejudice, or loss of benefits. I understand the extent to which my personal information will be kept confidential. As the research proceeds, I understand that any new information that emerges that might be relevant to my willingness to continue my participation will be provided to me. |   |                             |  |  |
|   | Please check if we have your                      | Rachel Gisewhite            |  |  |
| Parent/Guardian   | permission to post                                | Person Explaining the Study |  |  |
| of Research Participant   | student learning on<br>our social media<br>pages! | 8/1/2023                    |  |  |
| Date  | pagos.  | Date                        |  |  |

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## Environmental Justice STEMM Leadership Academy

**EJSLA** 



## Institutional Review Board Minor Assent Form

August 1, 2023

| Project Information  |   |                                 |  |  |
|--|---|---------------------------------|--|--|
| Project Title: Assessing Student Progress in an After-School Environmental Justice STEMM |   |                                 |  |  |
| Leadership Academy   |   |                                 |  |  |
| Protocol Number: 22-1642   |   |                                 |  |  |
| Principal Investigator: Rachel   | Phone: 228-214-3265                           | Email: rachel.gisewhite@usm.edu |  |  |
| Gisewhite  |   |                                 |  |  |
| College: Arts and Sciences   | School and Program: Center for STEM Education |                                 |  |  |

## **Research Description**

## 1. Why am I being asked to participate?

Researchers for the Environmental Justice STEMM Leadership Academy (EJSLA) will collect data to determine how students progress through the Academy. We are interested in seeing how students perceive STEM fields and STEM careers, scientific literacy, and how students engage with their community around regional and global environmental justice issues. Our data is primarily going to be used to report back to our funding agency, but we may also use the data to highlight the successes and challenges of the Academy in scholarly or academic publications.

#### 2. What will I have to do?

Students will be asked to take a pre-test before beginning the Academy, a shortened version of the same test periodically throughout the Academy, and a post-test at the end of the Academy. Each survey should not take more than 20-30 minutes to complete. Any other data we collect will be from the exercises you submit on our Academy Canvas page and will require no additional effort from you beyond what you will typically be doing for the Academy. We may also occasionally write down notes about your experiences completing the STEM activities or our group conversations related to the STEM and environmental and social justice issues we're engaging in.

#### 3. What do I get if I agree to participate?

If you agree to participate, the data we collect from your experiences and surveys will be used to inform other researchers, educators, and policy makers across the country, which may provide opportunities to create similar experiences for other students and help the members of your community throughout the U.S. and globally.

### 4. Can anything bad happen if I participate?

There are no known risks to participating in this study.

#### 5. Who will get to see information about me?

All of the data we collect on students will be de-identified. This means that we will assign a pseudonym, or false name, to each student, and it will be used throughout their time in the Academy. Only the researchers will know which pseudonym belongs to each student. All papers including your real information will be locked in a cabinet and destroyed after the study. All electronic information including your real information will be on a password-protected computer and our password-protected Canvas that can only be accessed by the researchers.

#### 6. What if I do not want to participate?

You do not have to participate in the study if you do not want to. You will still be treated the exact same way as the students that are participating in the study, and you will still be able to participate in the Academy.

7. Who may I contact if I have other questions or concerns about my participation?

This project has been reviewed by the Institutional Review Board. Its job is to protect research participants. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406-0001, 601-266-5997.

| Assent to Participate in Research   |                             |  |
|---|-----------------------------|--|
| Participants Name:  | Participant's Age:          |  |
| Person Soliciting Assent:   |                             |  |
| Check one of the following (to be completed by the person soliciting assent):                         |                             |  |
| ☐ In my opinion, this minor is able to provide informed assent (proceeding to Agreement to            |                             |  |
| Participate).   |                             |  |
| ☐ In my opinion, this minor is unable to provide informed assent for the following reason(s) (do not  |                             |  |
| proceed):   |                             |  |
|   |                             |  |
| Agreement to Pa   | rticipate                   |  |
| I agree to participate in this research project. The project has been fully explained to me and I was |                             |  |
| given the change to ask any questions I have about it. I understand that I can stop participating at  |                             |  |
| any time.   |                             |  |
|   | Rachel Gisewhite            |  |
| Research Participant  | Person Explaining the Study |  |
|   | , and the second            |  |
|   | 8/1/2023                    |  |
| Date  |                             |  |
|   | Date                        |  |