

West Virginia Governor's STEM Institute



Green Bank Observatory

Handbook for Students and Their Families

Rising Ninth Graders

July 22-August 4, 2018

WELCOME

Governor Jim Justice and the West Virginia Department of Education are proud to present the West Virginia Governor's STEM Institute at the Green Bank University. This unique program celebrates the achievement and potential of 60 of the state's most promising math and science students who will enter high school in the fall.

Governor's Schools are truly a community effort. Funded by the legislature and requested in the governor's budget, all Governor's Schools of West Virginia are administered by the West Virginia Department of Education. The host institution, the Green Bank Observatory, is instrumental in seeing to it that the GSI experience is unforgettable for the students.

The information provided in this booklet should answer many of the questions that parents/guardians have about the Governor's STEM Institute. Participation in GSI is an opportunity for students to meet and interact with other students and adults in an academic environment that facilitates and encourages exploration and understanding of advanced topics in mathematics and science.

We are happy to congratulate you not only for exploring the world of science and math but for having the wisdom to know that GSI is where you should spend two exhilarating weeks this summer. The Governor's Schools have long been shining stars in our state's education opportunities. You are now part of that magnificent brilliance.

Sincerely,



Sherry Keffer
Coordinator of Governor's Schools

WVGSI STUDENT HANDBOOK

Introduction

Students

Your participation in the “West Virginia Governor's STEM Institute summer program is a challenging opportunity for you to meet and interact with other students and adults in an enriched, relaxed, academic environment where you may explore studies of particular interest to you. You will be living and learning on the campus of the Green Bank Observatory in Green Bank, West Virginia, as a representative of your school, county, and state.

Your time at WVGSI Program will be a memorable experience. Your mind will be challenged as you discover new horizons while broadening your knowledge base. Moreover, you will become a member of a network of talented STEM students whose friendships will serve to support you throughout your lifetime.

Your acceptance of this opportunity carries with it an agreement to govern your behavior with integrity and a respect for others. You are to abide by all rules and regulations included in this packet. These guidelines are necessary in order for you to have the best possible learning experience.

Read this information carefully to familiarize yourself with the information you will need in order to have a successful and enjoyable experience at WVGSI.

Parents

The information provided in this booklet should answer many of the questions that parents/guardians have about the WV Governor's STEM Institute (WVGSI). Participation in WVGSI is an opportunity for students to meet and interact with other students and adults in an academic environment that facilitates and encourages exploration and understanding of topics in mathematics and science. This session of WVGSI is held on the campus of the Green Bank Observatory and is operated in partnership with the Governor's Office and the WV Department of Education.

Signed forms at the end of this document must be in our files in order for your child to participate. Please make sure that we receive them before WVGSI Program starts.

If you questions remain after reviewing this information, please contact:

Ms. Sue Ann Heatherly
Dean, WVGSI and Education Officer, GBO
P.O. Box 2
Green Bank, WV 24944
sheather@nrao.edu
304-456-2209

Residency Policy

- WVGSI is intended to be an intensive residential learning experience; therefore, you are expected to remain on campus for the duration of WVGSI, including weekends. You should plan to arrive at the Green Bank Observatory in Green Bank on Sunday, July 22 between 2:00 PM and 6:00 PM and depart after 12:00 PM on Saturday, August 4.
- Exceptions to this policy can be granted only in the event of an emergency. You will need to request permission from the WVGSI Dean stating the nature of the emergency your expected times for leaving and returning.

Visitor Policy

- You are not to entertain non-WVGSI visitors.
- Families are requested not to visit during WVGSI so that you will have sufficient time to interact socially with other WVGSI students.
- You may visit with members of the opposite sex only in the common areas.

Attendance and Participation Policies

You are required to attend all regularly scheduled classes, seminars, and special events. You are expected to participate actively in these instructional activities because this is the primary purpose of your invitation to WVGSI.

Disciplinary Policy

As a representative of your school, county, and state, you are expected to be an exemplary citizen. Certain behavior is incompatible with the philosophy of WVGSI. Disciplinary action in response to misbehavior is the responsibility of staff members.

There are three levels of discipline, the use of which is determined by the nature, frequency, or severity of the infraction.

1. **Verbal reprimand** by staff with written notice to the WVGSI Dean.
2. **Written warning** by the WVGSI Dean (Notice of Disciplinary Probation). A copy will be sent to the parent/guardian and local school counselor.
3. **Dismissal** by the WVGSI Dean.

Final decisions regarding dismissal from WVGSI will be made by the WVGSI Dean in consultation with the appropriate faculty and staff.

Should a student be dismissed, a letter setting forth the reason for the student's dismissal will be sent to the parent/guardian, and high school principal.

Destroying or damaging property is a serious matter requiring full compensation, resulting in a written warning or probation or dismissal.

Reasons for dismissal include, but are not limited to, the following:

- Absence from campus without permission from the WVGSI Dean;
- Any unexcused absence;
- Disobeying visitation policies;

- The use or possession of tobacco, alcoholic beverages or controlled substance, whether on-campus or off-campus;
- Unauthorized riding in a vehicle with another person.

Students who are determined to have violated the tobacco, alcohol, and controlled substances rule will be dismissed immediately.

Students who leave the authorized areas will be restricted to quarters on the first offense and dismissed immediately if the offense is repeated.

Mailing Address (Your name)

WVGSI Program
c/o Green Bank Observatory
PO Box 2
Green Bank, WV 24944

Telephone Information

Most classes will be held at the Green Bank Science Center on campus. The phone number of the Science Center is 304-456-2150.

If it is necessary that you receive a call during WVGSI, we will have to take a message, because we will not always be able to summon you to the phone. Please remind your family and friends that because of WVGSI activities you may be some considerable distance from the phone and not readily available to receive their calls. We will always be willing to take messages for you.

**NOTICE TO STUDENTS AND PARENTS
CONCERNING THE WVGSI
OUTDOOR PROGRAM AND ASSOCIATED RISKS**

The West Virginia Governor's STEM Institute (WVGSI) program is held at the Green Bank Observatory in Green Bank, WV. The area abounds with areas of scientific interest and offers opportunities for a wide variety of outdoor activities.

With each activity, it is necessary for the student and/or his family to accept the inherent risk while meeting the challenges offered by the terrain. As you will note, it is possible (though unlikely) that serious injury could be sustained in the activities identified below. In the past, a personal sense of accomplishment and self-sufficiency has often been the rewards to students who participate in some or all of these activities.

Higher Risk Activities:

There may be a day **HIKING** trip. These trips are on trails in the Monongahela National Forest over a variety of terrain. The more hazardous features of hiking in West Virginia are poison ivy, bees, rattlesnakes, and black bears. The staff members are informed of any student allergies and are alerted to the hazards mentioned above. We have never had an incident with a bear, and although we occasionally see rattlesnakes, there have been no instances of snakebite in our fifty-plus years of operation. Precautions are taken against blisters and sprains; however, these occasionally do occur.

BIKING. Small groups may cycle on GBO roads to get to and from the telescopes or for recreation. We provide appropriate helmets and take precautions; however, the potential does exist for an accident.

SWIMMING. We will take occasional breaks to go swimming at the GBO pool. The pool is staffed with certified lifeguards.

CAVING. Small groups may have the opportunity to go caving with experienced camp staff, exploring non-commercial caves. Some are wet caves and frequently involve some crawl ways as well as large rooms. A few caves have short climbs or drops of about ten feet which are negotiated with ropes. The staff members leading the caving trips are experienced with the caves used, and they explore them thoroughly before any campers are taken in. Cavers are equipped with helmets, lamps, electric back-up lights, and protective clothing. Scrapes and bruises are possible in caving, and although these are the summer months, potential rock fall and unexpected flooding could cause serious injury

Other Activities: Recreational or athletic activities at times result in accidents. They are usually caused by enthusiasm displayed at a moment when caution would be more in order. Sprains and bruises are often the result. Field sports, such as soccer, softball, frisbee, basketball and camp games are examples of these activities. All athletic activities are supervised by a staff person. These activities are not considered to be high-risk activities, and all students are encouraged to participate, but accidents do occur and could be serious.

WVGSJ Packing List

As you prepare for your nearly two-week stay at WVGSJ, the following list may help you make decisions about clothing and equipment needed for the many WVGSJ activities. Because personal space in the dormitory is limited, you should pack lightly while still being prepared for hot weather, cold weather, rainy days, etc. The weather in the eastern mountains of West Virginia can be quite erratic in July. Typical daily temperatures range from 50°F in the morning to 75°F in the mid-afternoon. Temperatures below 45°F are very rare, but snow has been reported previously in July. Rainfall is fairly common with noticeable precipitation every 4 or 5 days.

Laundry facilities will be available during your stay (parents should make students familiar with the operation), so keep that in mind as you pack. You will need to bring a **LAUNDRY BAG** to carry your clothes to be washed. If an item cannot go in a dryer, it would be best not to bring it.

I. Everyone should bring:

OLD CLOTHES suitable for outdoor activities such as backpacking, stream-wading. Layering clothes is often helpful in dealing with very cool mornings and warmer afternoons, so keep lightweight shirts and heavier sweatshirts in mind. The old clothes we suggest you bring include:

- _____ One pair of lightweight, loose-fitting cotton (or cotton-blend) pants for hiking
- _____ One pair of old jeans
- _____ Two comfortable lightweight shirts or t-shirts
- _____ Two warm sweaters or sweatshirts (mornings and evenings can be quite cool)
- _____ One warm hat

For hiking. . .

- _____ We suggest that you wear hiking boots for outdoor trips. If you have **broken-in** hiking boots, bring them along. Otherwise, sneakers will be sufficient (Shoes that have a wedged sole or running shoes do not give necessary support.) If you feel compelled to buy new hiking boots, **be sure to break them in before coming to camp.**
- _____ Two pairs of lightweight socks and two pairs of heavier socks (to be worn over the lightweight socks to prevent blisters.) Note that synthetic fabrics such as polypropylene are preferable to cotton.

CASUAL CLOTHES suitable for in-camp activities (the kind of clothes you would wear around the house).

- _____ Five casual shirts or t-shirts
- _____ Three long-sleeved shirts or sweatshirts
- _____ Three pairs of jeans or casual pants
- _____ Five pairs of shorts
- _____ **AT LEAST** seven pairs of socks (so that you'll have an extra pair of dry socks when it rains)
- _____ Athletic shorts/shirts (if you intend to run in the mornings or play sports during the afternoon)

OTHER CLOTHES which we suggest include:

- _____ Warm Pajamas (sweats make great pajamas because the nights in our mountains are cool)
- _____ Swimsuit
- _____ Medium-weight jacket (synthetic fabric is best)
- _____ Rain gear

SHOES which we suggest include:

- Casual shoes for in-camp activities
- A pair of old tennis shoes or boots for stream wading
- Shower shoes

II. Additional packing notes:

- Pillow with case
- Sleeping bag
- Bath towel
- Washcloth

III. Everyone is encouraged to bring:

- Flashlight or headlamp
- Writing materials
- Camera and film.
- Toiletries
- Sunglasses
- Musical instruments and sheet music (if you are a musician)

** Because of the close living arrangements, we do not permit the use of audio devices without headphones. **Please leave them at home.**

** WVGSI is held at the Green Bank Observatory within the National Radio Quiet Zone that protects the radio spectrum from interference. **Cell phones do not work.**

** We recommend that you do **not** bring your own computer.

** Except for postage for letters home, and junk food money, we cover almost every cost associated with your stay at the WVGSI. You need not bring much spending money to camp.

PLEASE Return the Information Forms below. They are necessary for your child to participate in WVGSI.

You may mail them to:

Sue Ann Heatherly
PO Box 2
Green Bank, WV 24944

Or scan and email them to sheather@nrao.edu

WVGSI - STUDENT INFORMATION FORM

Please print clearly in **black** ink.

Full Name			
Last		Suffix (Jr., Sr., III)	
First		Middle	
Date of Birth (mm-dd-yyyy)		Age:	
		Place of Birth	
Contact Information			
Street Address		Home Telephone	
City		E-mail Address (Optional)	
State		Preferred Name (to be used on nametag)	
Country			
Gender (circle one)		Adult T-Shirt Size (circle one)	
Male		Female	
		Small	Medium
		XL	XXL
		Large	
		XXXL	
Schools		College Education Plans	
Middle School	High School	Major:	
Publicity Release			
<p>The undersigned hereby grant permission to the West Virginia Governor's STEM Institute (WVGSI), and the Green Bank Observatory, its representatives and successors to use identified photographs, video and audio recordings, and press releases of the student for the purpose of publicity and other promotions, including Internet publications. The student's name and address may be released to institutions providing educational excellence.</p>			
Signature of Student		Date	
Signature of Parent/Guardian		Date	
Release from Liability			
<p>The undersigned hereby release WVGSI, and its staff, from any and all claims arising from the undersigned student's participation in the WVGSI.</p>			
Signature of Student		Date	
Signature of Parent/Guardian		Date	
Rules Agreement and Field Trip Permission			
<p>Having reviewed and discussed (student/parent/guardian) the rules in the Handbook for attendance, participation, and living applicable to the WVGSI at the Green Bank Observatory, the undersigned student agrees to abide by all rules of the school and commit to attend WVGSI from July 22-Aug 4, 2018. The undersigned parent/guardian gives permission for the student to participate in any field trips planned and organized by WVGSI.</p>			
Signature of Student		Date	
Signature of Parent/Guardian		Date	
Consent to Participate			
<p>The undersigned student hereby acknowledges that I have read the accompanying notice describing the outdoor program of the WVGSI camp and the associated risks. I have discussed the outdoor activities' risks with my parent(s)/guardian(s).</p>		<p>The undersigned parent/guardian hereby consents to my child's participation in WVGSI. I have read the accompanying notice describing the outdoor program of WVGSI and the associated risks. I assume personal responsibility for any costs of medical attention or injuries my child may sustain. I have discussed the outdoor activities' risks with my child.</p>	
Signature of Student		Date	
Signature of Parent/Guardian		Date	

Name: _____
Last, First Middle

WVGSI - EMERGENCY CONTACT AND MEDICAL INFORMATION

The information on this form is gathered to assist us in identifying appropriate care. Any changes of the information on this form after it is sent in should be provided to WVGSI personnel upon your arrival. Provide complete information so that the WVGSI can be aware of your needs.

Please notify WVGSI if this person is exposed to any communicable disease during the four weeks previous to arrival.

Emergency Contact #1

Full Name	Relation to Student
Day Telephone	Evening Telephone

Emergency Contact #2

Full Name	Relation to Student
Day Telephone	Evening Telephone

Family Physician

Full Name	Relation to Student
Day Telephone	Evening Telephone

Permission to Provide Necessary Treatment or Emergency Care

I hereby give permission to the medical personnel selected by the WVGSI staff to order X-rays, routine tests, treatment; to release any records necessary for insurance purposes; and to provide or arrange necessary related transportation for my child. **In case of medical emergency**, I understand that every effort will be made to contact the parents or guardians of the student. In the event I can not be reached, I hereby give permission to the physician selected by the camp director to secure and administer treatment, including hospitalization, for the person named above. This completed form may be photocopied for field trips. Parents/guardians are responsible for medical expenses incurred during WVGSI.

Signature of Student	Date	Signature of Parent/Guardian	Date
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Insurance Information: Please include a copy of both sides of your insurance card. This should include the following information:

1. Policy holder's name and social security number
2. Employer's name
3. Policy and/or Group number
4. Name and address of insurance carrier

Explain any restrictions to activity (e.g. what cannot be done, what adaptations or limitations are necessary)

General Questions (Explain "yes" answers below. Attach additional pages if necessary.)

Has/does the student:	Yes	No	Yes	No
1. Had any recent injury, illness or infectious disease?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Have a chronic or recurring illness/condition?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Ever been hospitalized?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Ever had surgery?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Have frequent headaches?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Ever had a head injury?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Ever been knocked unconscious?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Wear eyeglasses, contacts, or protective eye wear?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Ever had frequent ear infections?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Ever passed out during or after exercise?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Ever been dizzy during or after exercise?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Ever had seizures?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Ever had chest pain during or after exercise?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Ever had high blood pressure?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Ever been diagnosed with a heart murmur?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Ever had back problems?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Ever had problems with joints? (e.g. knees, ankles)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Have any skin problems?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Have diabetes?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Have asthma?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Had mononucleosis in the past 12 months?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Had problems with diarrhea/constipation?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Have problems with sleepwalking?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. If female, have an abnormal menstrual history?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Have a history of bed-wetting?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Ever had an eating disorder?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Ever had emotional difficulties for which professional help was sought?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain any "yes" answers, noting the number of the questions.

Immunizations (Please fill out as completely as possible.)

Which of the following has the participant had?	Please give all dates of immunization for:								
	Vaccine:	Date:	Mo/Yr	Mo/Yr	Mo/Yr	Mo/Yr	Mo/Yr	Mo/Yr	Mo/Yr
<input type="checkbox"/> Measles	DTP		_____	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> Chicken pox	TD (tetanus/diphtheria)		_____	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> German measles	Tetanus		_____	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> Mumps	Polio		_____	_____	_____	_____	_____	_____	_____
<input type="checkbox"/> Hepatitis	MMR		_____	_____	_____	_____	_____	_____	_____
	or Measles		_____	_____	_____	_____	_____	_____	_____
	or Mumps		_____	_____	_____	_____	_____	_____	_____
	or Rubella		_____	_____	_____	_____	_____	_____	_____
TB Test	Haemophilus influenza B		_____	_____	_____	_____	_____	_____	_____
Date of last test _____	Hepatitis B		_____	_____	_____	_____	_____	_____	_____
Result: <input type="checkbox"/> Positive <input type="checkbox"/> Negative	Varicella (chicken pox)		_____	_____	_____	_____	_____	_____	_____
	BCG		_____	_____	_____	_____	_____	_____	_____

Allergies - List all known and describe reaction and management of the reaction.

Medication allergies (list)

Food allergies (list)

Other allergies (list)--Include insect stings and environmental allergies

Medications being taken: Please list ALL medications (including over-the-counter or non-prescription drugs) taken routinely. Bring enough medication to last the entire time at camp. Keep it in the original package or bottle that identifies the prescribing physician (if a prescription drug), the name of the medication, the dosage, and the frequency of administration.

Check one:

- This person takes NO medications on a routine basis, or
- This person takes medications as follows:

Med #1 _____ Dosage _____ Specific times taken each day _____

Reason for taking _____

Med #2 _____ Dosage _____ Specific times taken each day _____

Reason for taking _____

Med #3 _____ Dosage _____ Specific times taken each day _____

Reason for taking _____

Med #4 _____ Dosage _____ Specific times taken each day _____

Reason for taking _____

(Attach additional pages for more medications.)

This health history is correct and complete as far as I know. I hereby give permission for any of the following over the counter medications to my child as necessary (check all that apply).

___ Aspirin ___ Tylenol ___ Advil

Parent/Guardian Signature

Date

Student Signature

Date



National Radio Astronomy Observatory

USE, WAIVER AND RELEASE AGREEMENT

INDEMNIFICATION

In consideration for below minor being permitted by AUI/NRAO to use the Green Bank facilities which includes the use of its information, and services, I agree to the following waiver, release and indemnification:

The undersigned parent or guardian of the above minor, for himself/herself and on behalf of the said minor, hereby joins in the foregoing waiver and release and hereby stipulates and agrees to save and hold harmless, indemnify and forever defend the AUI/NRAO, their directors, officers, agents, employees and volunteers from and against any claims, actions, demands, expenses, liabilities (including reasonable attorney's fees) and NEGLIGENCE made or brought by said minor or by anyone on behalf of said minor, as a result of said minor's participation in the activities at the Green Bank site. I, for myself and on behalf of said minor, further agree not to sue AUI/NRAO as a result of any injury, paralysis or death that said minor suffers in connection with the use of the Green Bank facilities.

Signature of Parent, Guardian or Custodian _____ Date _____

Witness _____ Date _____

Printed Name of Minor _____