



# VJAS VOICE

THE VIRGINIA JUNIOR ACADEMY  
OF SCIENCE'S QUARTERLY PAPER

---

FALL 2020 EDITION, ISSUE 1

---

“EVERY BRILLIANT  
EXPERIMENT,  
LIKE EVERY  
GREAT WORK OF  
ART, STARTS  
WITH AN ACT OF  
IMAGINATION.”

**JONAH LEHRER**

## VJAS STUDENT GOVERNMENT

**PRESIDENT:**  
SHAN LATEEF

. . .

**VICE PRESIDENT:**  
KARLY RAMNANI

. . .

**SECRETARY:**  
HARRISH GANESH

. . .

**EDITOR IN CHIEF:**  
ARMAN LATEEF

. . .

**COMMUNICATIONS LIAISONS:**  
LAASYA KONIDALA  
ANDREW QI

## WHAT'S NEW?

- **BioBlitz 2020:**

The Virginia Academy of Science (VAS) would like to invite you, and all your friends and family, to join us in surveying the biodiversity in every part of the Commonwealth! To join, read more on Page 5.

- **VJAS Online Paper Submissions:**

We are excited to announce our first ever online submissions using the Reviewr platform.

- **VJAS Mentorship Assistance Program:**

If you are a middle or high school teacher with an interest in having a mentor work with your class, please fill out the form on Page 2.

- **Vaccine Research Opportunity:**

*(7th grade students only)*

Georgetown University is conducting a study on vaccines - what they are, what they do, and how they prevent diseases. To participate, please read more on Page 2.

- **VJAS Student-Student Mentorship Program -  
From Science to Service:**

Based on interest, we will match middle school scientists with high school seniors who have experience participating in VJAS.

## WHAT'S INSIDE?

**Page 2** - Returning to School

**Page 3, Top** - The Virtual Convention

**Pages 3 and 4** - Interview with VJAS Director,  
Mrs. Booth, EdS

**Page 5** - How Science Begins

**page 5** - BioBlitz 2020

# VJAS VOICE

FALL 2020 EDITION, ISSUE 1

## RETURNING TO SCHOOL

SHAN LATEEF

### WELCOME TO THE 2020-2021 SCHOOL YEAR!

#### **Dear VJAS community,**

It is truly an honor and privilege to serve as President of the VJAS student government for a second term. I hope everyone is having a wonderful return to the school. Our last academic year was ravaged by COVID-19 and as a VJAS community we experienced the disappointment of a cancelled symposium at James Madison University. This year too will have its challenges as well as its opportunities. What better time than this unfolding catastrophe to teach us the relevance of science in our lives? The pandemic has united scientists around the globe as they frantically race against time to create a vaccine, conduct scientific research and share their knowledge in an effective and timely fashion. Even though school will be different this year, VJAS is committed to offering our student scientists many opportunities to remain engaged. These programs (described in detail on the VJAS website) include:

#### VJAS Online Paper Submissions:

We are excited to announce our first ever online submissions using the Reviewr platform. At this time we anticipate having a hybrid Research Symposium, where students can either come to the site or present remotely, but this will be finalized in January.

#### VJAS Mentorship Assistance Program:

If you are a middle or high school teacher with an interest in having a mentor work with your class, please fill out the form found at:

<https://secure4.hsc.edu/forms/view.php?id=116443> [secure4.hsc.edu]

#### Vaccine Research Opportunity:

(7th grade students only):

Researchers from Georgetown University Medical Center are conducting this study to help young people learn more about vaccines - what they are, what they do, and how they can help prevent diseases. To participate in the Online Vaccine Educational Research, see the flyer at:

[http://vjas.org/uploads/3/5/6/5/35657139/5\\_0\\_vaccine\\_education\\_study\\_flyer\\_revised\\_13jul20\\_\\_2\\_.pdf](http://vjas.org/uploads/3/5/6/5/35657139/5_0_vaccine_education_study_flyer_revised_13jul20__2_.pdf) [vjas.org]

#### VJAS Student-Student Mentorship Program - From Science to Service:

We aim to connect experienced high school seniors with middle school students just beginning their journey in scientific research. Based on their interest, we will match interested middle school

scientists with high school seniors who have experience participating in VJAS. Sponsors of both the mentors and mentees will be expected to supervise any interaction that occurs between the students.

Details on sign-up and registration for the program are available on our website.



So let your imagination guide you and your passion propel you - then apply the science that you have learned within and outside your classroom. I wish everyone academic success and fruitful scientific missions, until we "meet" in May 2021.

Yours in Science,

*Shan Lateef*

## THE VIRTUAL CONVENTION

### KARLY RAMNANI

The VJAS 2020 symposium was planned for May 26th-28th, 2020 at James Madison University. Unfortunately, due to the coronavirus, Students could not stay on JMU's beautiful campus, watch each other's presentations, or attend the lectures this year. However, we still wanted to acknowledge the students' hard work, therefore the virtual symposium and awards ceremony was held on Thursday, May 28th, with a follow-up event for special awards on Thursday, June 25th. In the first event, the VJAS faculty and student officers presented speeches, encouraging young scientists to find a silver lining in this unprecedented situation. "The solutions that have been developed around coronavirus, like car companies making their parts into ventilators, apps tracking the global spread of cases, a vaccine that may be fastest ever developed and cleared for human use, and

more, show us how vital science is to our society," said Vice President, Claire Morton. The VJAS experience turned out differently than any of us anticipated. The drastic changes brought about by COVID-19 have forced the cancellation of many in-person events. However, as an organization, we stuck together to overcome the challenges. Due to the technology available to us, we could still hold our symposium virtually. We could still honor the hard work of many young scientists. The VJAS committee is thankful to everyone who attended the ceremony or helped put it together. We will be making changes to the 2020-21 plan for holding the virtual symposium, so this year, we hope to include more elements of the VJAS experience in a safe manner.

## INTERVIEW WITH VJAS DIRECTOR, MRS. BOOTH, EdS

### ARMAN LATEEF

Arman: The COVID-19 pandemic has affected every organization and VJAS is no exception. What have

been some of the major changes that you have had to encounter in the past few months?

Mrs. Booth: *Fortunately papers were submitted in February and processed in March to readers. April, announcements were made of those papers selected for the May Symposium. The papers were once again mailed but this time to judges. What was interesting was the handling of paper (because) at one point people were afraid the virus could spread through paper product. Also, businesses, colleges and universities were being shut down and schools (were being) closed. People either left their papers at their work, thinking that they would be going back or they weren't there to receive them, so they came back to me. That's when we started*

Mrs. Booth, cont.: *to look for alternative methods and online submission for the future.*

Arman: I understand that plans are underway for digital paper submissions and the students are on the whole very excited about this. It must have taken a lot of planning to make this happen. Can you share your perspective on this?

Mrs. Booth: *We are glad to announce that after months of collaboration we are moving to online submission that we will open in September.*

Arman: Although it's still early, some are wondering what the VJAS symposium will look like in 2021. Do you have thoughts to share on this?

CONTINUED ON PAGE 4

## INTERVIEW WITH VJAS DIRECTOR, MRS. BOOTH, EdS continued ARMAN LATEEF

Mrs. Booth: We are constantly reviewing the CDC guideline, University hosting support and School budgets. Currently (August) we re looking at a hybrid meeting but we will evaluate in October. Right now, we're not sure what it entails (since) a lot of budgets have been cut and social distancing requirements must be met. Please continue to check back to the VJAS website for those updates.

Arman: Do you have any advice for the Junior Academy scientists during these uncertain times?

Mrs. Booth: I think you should still push forward and I don't think you need to be at a school to do an experiment. Quality experimentation can be simple. The VAS (Senior Academy) is offering mentorships, as well as senior students for junior students. You (also have to) realize your teachers are under a lot of stress, and this is new for them. Usually teachers get the opportunity to get to know you, so they knew what you are interested in or capable of doing or what to provide to you. I think we're going to see a lot of individualization. My hope is that we all continue to thrive, do our best and keep on doing scientific research.

Arman: I understand that plans are underway for digital paper submissions and the students are on the whole very excited about this. It must have taken a lot of planning to make this happen. Can you share your perspective on this?

Mrs. Booth: We are glad to announce that after months of collaboration we are moving to online submission that we will open in September.

Arman: Although it's still early, some are wondering what the VJAS symposium will look like in 2021. Do you have thoughts to share on this?

Mrs. Booth: We are constantly reviewing the CDC guideline, University hosting support and School budgets. Currently (August) we re looking at a hybrid meeting but we will evaluate in October. Right now, we're not sure what it entails (since) a lot of budgets have been cut and social distancing requirements must be met. Please continue to check back to the VJAS website for those updates.



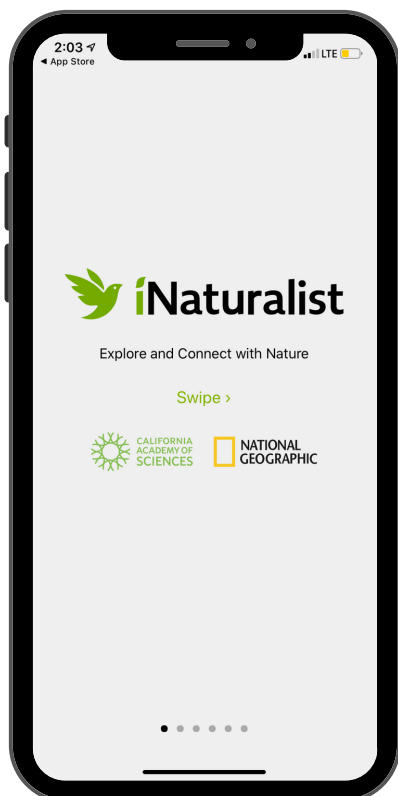
Above, Virginia Junior  
Academy Director,  
Mrs. Susan Booth, EdS

## HOW SCIENCE BEGINS: BRAINSTORMING IDEAS FOR YOUR VJAS PROJECT SATTWICK NATH

Writing about a topic in VJAS is intellectually rewarding, but sometimes finding an idea for your research project may be challenging. If you can't think of an idea, there are many places that you can look for inspiration. For instance, you can look around you for problems that you or others around you face and propose solutions. You can ask yourself questions about how something works, whether there is an easier way to do it. Looking at the latest scientific inventions can also help you think about projects that can build up on those ideas. At times, reading scientific journals and looking at prior research can help you find areas of unsolved problems.

Whichever project you choose, make sure you will enjoy doing it because that will produce the best work. Due to the COVID-19 pandemic, you will have to make sure that you can complete your entire project in a safe area. Some projects require going to public areas, such as labs, to work with things you can't use at home, such as specific chemicals. When coming up with possible project ideas, make sure that you can do everything at home or another safe area with appropriate supervision. We hope that you come up with a great science project and wish you the best of luck in completing it safely.

## VIRGINIA BIOBLITZ 2020



The Virginia Academy of Science (VAS) is organizing a Statewide BioBlitz, Virginia BioBlitz 2020, to promote exploration, discovery, citizen science, and conservation. Come join us to survey the biodiversity in every part of the Commonwealth. This is a VIRTUAL EVENT facilitated through **iNaturalist**, so, you can join from home or anywhere else in Virginia! This event is open to anyone willing to spend some time outdoors, explore biodiversity and learn more about species living around you. We welcome toddlers, K-12 students and teachers, scouts, college students, wildlife professionals, scientists, naturalists... anyone! All it requires is registration at our website, downloading the iNaturalist App into your smartphone or tablet, joining the Virginia BioBlitz iNaturalist project and reporting species around you!

When? Saturday, September 26, 2020  
Virtual Kickoff Event at 9:00am

Where? Anywhere in Virginia

You can find more information and register at Virginia BioBlitz website at:

<https://sites.google.com/view/virginiabioblitz/>