JANUARY 2025 ISSUE 3



# **CNHS Fall 2024 NEWSLETTER**



## **Student Research: NURVa**

**Student Spotlight** 

Student Research: Psychoneuroimmunology of Risk and Disease Laboratory

Student Research: Center for Biotechnology, Genomics, and Bioinformatics

Student Research: Pharmaceutical Engineering Pathways Project

Student Research: Nuclear Science Lab

**Student Accomplishments** 

**Community Engagement** 

Trojan Empowerment Summit

**VSU PRIME** 

**Faculty Activities** 









# Student Research: NURVa

On October 26, 2024, Virginia State University hosted the 5th annual NURVa conference, with 165 attendees. Seventy-five students from universities including Virginia State, VCU, 'Liberty, and others presented their research. The event also featured a Graduate Student Fair with representatives from Marymount, ODU, VSU, and VCU.

Dr. LaChelle Waller, Director of Undergraduate Research, led the conference with the help of seven student volunteers.

Read More about the NURVa Program











# **Student Spotlight**

Chelsey (Cooper) McGill attended and presented her Colorectal Cancer research at the annual <u>American</u> <u>Psychological Association (APA)</u> Convention. Chelsey received the highest honor in APA's Division 38- Health Psychology, being awarded the Outstanding Poster Presentation silver star Seattle, Washington, August 2024

Chelsey (Cooper) McGill, now Dr. Chelsey McGill, successfully defended her doctoral dissertation and is currently a T32 Postdoctoral Fellow at VCU Massey Comprehensive Cancer Center in Richmond, VA.









## Student Research: Psychoneuroimmunolo gy of Risk and Disease Laboratory

Davian Clifton presented "Examining Internalizing Symptoms and Their Association With Sexual Attraction-Identity Discordant Individuals" at the <u>2024 Annual</u> <u>Biomedical Research</u> <u>Conference for Minoritized</u> <u>Scientists</u> in Pittsburg, PA.

Alexis Morris and Emma Quarles both attended and presented their research at the annual <u>American Psychological</u> <u>Association (APA) Convention</u> in Seattle, Washington. Alexis Morris also presented at the Society for Psychophysiological Research Conference in Prague.

**Read More about the PNIRD Lab** 

David Clifton at ABRCMS



Emma Quarles at APA Convention



Alexis Morris at APA Convention



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## Student Research: Center for Biotechnology, Genomics, and Bioinformatics

Jada Jones, M.S. in Biology student, Conducted graduate research at Dr. Xie's lab in Fall 2024. Dr. Xianfa Xie is the Director of the VSU CeBiGeBi and Associate Professor in the Department of Biology,

Arinze Egwu, advisee of Dr. Xie completed summer research at the VCU Massey Cancer Center (MCC) and presented a poster at the MCC Research Retreat in September 2024.

Jada Jones at work GeBiGeBi center



**Read More about the Center** 

Arinze Egwu at MCC Poster Session

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Dual Degree

ABBM

R&D



**Dual Degree track** – provide dual VCU/VSU bachelor of science degrees to students beginning academic year 24-25

2-year / 4 year track – target and recruit high school graduates to attend VSU with courses from regional community colleges

Accelerated track – produce advanced degrees in chemical engineering

Certificate track – course offerings in pharmaceutical engineering, pharmaceutical manufacturing, and pharmaceutical sciences

R&D track – engage high school, undergraduate, graduate students in research

# FINANCIAL SUPPORT PROVIDED

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1

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## Student Research: Pharmaceutical Engineering Pathways Project

2-year / 4-year

ccelerate

Three students, Tayona Burgess, Jada Watkins and Robert Lomax III, presented their summer research in Fall 2024 <u>at the 5th Annual Network</u> <u>for Undergraduate Research in</u> <u>Virginia Conference.</u>

These students were among several (titles listed to the right) who participated in the Build Back Better Pharmaceutical Engineering Pathways Project and mentored by Chemistry faculty (in bold). R&D Track. VSU Undergraduate students, their mentors and research

Rayna Jones:; Development of Uniform Organic Crystals; Mentored by Dr. James Feffi (2024 VCU Build Back Better Regional Challenge (BBBRC) REU program)

Robert Lomax III: Synthesis of UiO-66 and Evaluation of Particle Size Dependence and Adsorption Capacity; Mentored by **Dr. Karl Jackson** (VSU-VCU Pharmaceutical Engineering Pathways Project) (<u>Cover photo</u>)

Andralyn Sandoval: •Design and Synthesis of Azepine as Potential Serotonergic Agonists; Mentored by **Dr. Vincent Nziko** (VSU-VCU Pharmaceutical Engineering Pathways Project)

Mic'Kayja Tatum: Design and Synthesis of Azepine as Potential Serotonergic Agonists; Mentored by **Dr. Vincent Nziko** (VSU-VCU Pharmaceutical Engineering Pathways Project)

Jade Watkins: Synthesis and Characterization of 10-thiastearic acid and initial inhibition studies with Aspergillus sp.; Mentored by **Dr. Robert White** (VSU-VCU Pharmaceutical Engineering Pathways Project) (<u>NURVa Photo</u>)

Read More about the Pathways Project



## **Detector testing at Triangle Universities Nuclear Laboratory**



# Student Research: VSU Nuclear Science Lab

Dr. Thomas Redpath, associate professor in the Department of Chemistry, tested a neutron detector prototype at the Triangle Universities Nuclear Laboratory (TUNL).

The VSU team included Dr. Thomas Redpath, with students Jalen Felix, Trinity Allen, Justin Brown, and Sarah Timothy. Other members of the team hailed from Augustana College, Davidson College, TUNL, Michigan State University and James Madison University.





Jalen Felix (left) working with Mackenzie Lauridsen (center) Hanna Gebremariam (right) from Augustana College to assemble the SiPM grid for one of the detector tests.



Justin Brown working on detector assembly.



Journal of the International Neuropsychological Society (2024), 1–8 doi:10.1017/S135561772400047X

#### **Research Article**



# Determining associations between Big Five personality traits and executive function in an undergraduate student sample

Emma Quarles<sup>1,2</sup> <sup>(0)</sup>, Samuel J. West<sup>1,3</sup> and Larry Keen<sup>1,2</sup>

<sup>1</sup>Department of Psychology, Virginia State University, Petersburg, VA, USA, <sup>2</sup>Center for Outreach and Treatment Through Education and Research, Virginia State University, Petersburg, VA, USA and <sup>3</sup>Department of Surgery, Virginia Commonwealth University, Richmond, VA, USA

## Notable Student Accomplishments

Emma Quarles, VSU Post Bac in the department of Psychology, was first Author on a publication Determining associations between Big Five personality traits and executive function in an undergraduate student sample.

Taylor Davis, a senior nursing student in the online RN to BSN program, received a \$10,000 Abbott Scholarship from the National Black Nurses Association for her academic excellence, financial need, and commitment to serving vulnerable populations. She was honored at the 2024 NBNA Institute and Conference in San Francisco.

Biology Alumni: Aaliyah Thompson (2024) was accepted to Howard University dental school and Dr. Keyaita Hodge, accepted a post-doctoral fellowship at Morehouse School of Medicine.

Read The Research Article Visit the Department of Nursing Webpage





Above: Emma Quarles, VSU Post Bac in the Department of Psychology



Middle Left: Taylor Davis, senior nursing student.

Bottom Left: Dr. Keyaita Hodge, VSU Biology Graduate and Math Minor (Summa Cum Laude 2011).





## Community Engagement

Drs. Witiak and Whalen conducted a series of activities for the Urban Forestry and Ecology Laboratory (Special Topics). The class introduced students to ways Biology can be used to improve urban systems. As part of the course they learned about the importance of tree cover, water management, community participation and service. Students performed research and several received certifications in woodland fire, drone piloting and herbicide applications. The implementation of this course is part of grant number 23UCF35 - Development of Arborist and Forestry Curriculum at Virginia State University.

Read More about this Community Effort Read about the VSU Research See Petersburg Heat Map On Friday, 20 September 2024, Dr. Matt Whalen accompanied 17 students from his ecology class on a boat tour of the James River with James <u>River Association</u> (JRA). JRA, founded in 1976, is a non-profit dedicated to preserving the 10,000 acres of watershed for the James River. VSU partners with JRA for education and research initiatives. During the boat tour, students recorded water quality data, collected fish in a trawl, and visited both <u>Presquile National Wildlife</u> <u>Refuge</u> and the mouth of the Appomattox River at Hopewell.

Chanel Randall, Denasia Garland, Folashade Jones, Franchesca Synsmir, Jazlyn Howell, Jetuan Bourne, John Portier Jr, Kamieo Starling, Khari Hall, Kiara Boone, Makayla Moss, NaDayesiah Norman, Nicolas Effang, Nore Jackson, Jaila Walton, Jamiyah







The Psychoneuroimmunology of Risk and Disease Laboratory, PNIRD, and the Center for Outreach and Treatment Through Education and Research, Ce. OTTER, team directed by Dr. Larry Keen, associate professor in the department of Psychology interacted with the community in multiple venues during the Fall 2024 semester.

The Team attended the Community Recovery Day in <u>Petersburg</u>. The event celebrates sobriety and supports others in recovery. The team also conducted a clothing drive for the James House, a nonprofit aiding victims c sexual violence, domestic violence. and stalking in the Greater Tri-Cities region. Dr. Keen and his team also attended the James House Hooray for Hollywood Casino Night.





· Hygiene Products such as Shampoo Conditioner, Soap, Toothpaste,

FROM: NOVEMBER Toothbrushes, and Lotion 04 - 27

**Meet the PNIRD Team** 





## Community Engagement

The Virginia State University Public Health Institute, Delta Omega Chapter of Omega Psi Fraternity Incorporated, City of Petersburg, and Bon Secours collaboratively hosted a Prostate Cancer Awareness event on September 19th. The program served to "kick-off" an ongoing campaign addressing health disparities that plague communities of color. Leading up to the event, CNHS Dean Derrick Scott and the Honorable Mayor Samuel Parham, City of Petersburg, appeared on <u>CBS channel 6</u> Virginia This Morning to promote and encourage residents in the Tri-Cities area to attend



Share on LinkedIn

Virginia State University Student Chapter, congratulations on earning your 2023-2024 Honorable Mention Student Communities Award credential!

The American Chemical Society Recognized the VSU Chemistry Club/ACS student affiliate for the second year in a row. The Honorable Mention was based on their service to the community.

View my credential



**Read More about the Prostate Awareness Event** 



#### UNITED STATES DEPARTMENT OF JUSTICE

DRUG ENFORCEMENT ADMINISTRATION

In the Matter of

Scheduling of Controlled Substances: Placement of 2,5-dimethoxy-4- iodoamphetamine (DOI) and 2,5-dimethoxy-4-chloroamphetamine (DOC) in Schedule I. Docket No. 24-24

Administrative Law Judge Paul E. Soeffing

PETITIONERS SCIENCE POLICY COUNCIL, SSDP AND DR. RAUL RAMOS'S JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

## Community Engagement

Jason W. Younkin associate professor of biology, testified at a DEA hearing involving scheduling DOI and DOC, two psychedelic drugs used in labs. Fifteen persons testified as to why DOI and DOC should not be Schedule I.

Dr. Younkin holds a Ph. D. in neurochemistry and his research interests include the study of psychedelics as potential therapeutics. Psychedelics are increasingly being examined as treatments for psychiatric diseases, including PTSD, depression, addiction, and many others.



SSDP Kicks off DEA Court Hearing with Press Conference in Arlington, Virginia This morning in front of the Drug Enforcement Administration (DEA) Headquarters in Arlington...

S SSDP / Nov 12, 2024

D<u>r. Kenneth Lewis</u>. associate professor of Psychology, continues his work helping students succeed. His past community engagement has included engaging VSU students in the cleanup and restoration of <u>Petersburg Legends Park</u> trails.



**Read the Legal Brief** 





## Trojan Empowerment Summit

On September 5, 2024, the College of Natural and Health Sciences hosted its first Trojan Empowerment Summit on the second floor of Jones Dining Hall, designed for chemistry, biology, and psychology majors. The summit's theme, "The RIGHT STUFF," featured sessions on intellectual, emotional, spiritual, and social wellness. Uniquely organized and led by students, the event focused on relevant topics to support today's undergraduate challenges. Exhibits, including booths by the Divine 9, were also student-led.





Read More: The Empowerment Summit Program

Read More : The Empowerment Summit Report





The Office of Pre-Professional Health Services & Career Strategy introduced the P.R.I.M.E Executive Board. PRIME, Pre-Health Related Interest in Mentoring Experiences, is dedicated to inspiring and supporting students at VSU who are pursuing careers in health care.

Ms. Laila Jones (Right), Bennika Mitchell, Biology Junior, and Zy'Kia Williams, were funded by <u>Sentara</u> <u>Healthcare</u> to participate in an individually tailored premedical program at the University of Central Florida School of Medicine. The three scholars are featured on the <u>Future Physicians of</u> <u>America website</u>.

**Connect with VSU PRIME** 





Read Feature story about Ms. Laila Jones Read More about the Office of Pre-Professional Health Services & Career Strategy





## **Faculty Activities**

Dr. Samuel-Harris, Chair of the Nursing Department, presented at the AACN Transforming Nursing 2024 Conference and attended a Mentoring for Success of Nursing Schools workshop at Morgan State.

Dr. Larry Keen, Director of PNIRD and Associate Professor in the Department of Psychology attended the Society for Psychophysiological Research Conference in Prague.

Dr. Kimberly Lawrence, Associate Professor in the Department of Psychology, presented at the Institute for Academic Feminist Psychologist in Philadelphia, PA. She also completed the CIMER Mentorship Training Program at Duke.

Visit the Department of Nursing Webpage



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web.

here - here.







## **Faculty Activities**

Dr. Christian D'Orgeix, professor in the Department of Biology, presented "Hear that Lonesome Whistle Blow: The Impact of Railroad Tracks on Turtles," a<u>t the World Congress of Herpetology in</u> <u>Borneo</u>. The work was based on research conducted with VSU students.

Dr. Christian D'Orgeix's lab reports the first case of a melanistic variant of Slevin's bunchgrass lizard (Sceloporus slevini) in Arizona. This rare coloration may offer thermal advantages in high-elevation populations, paving the way for future studies on thermal absorption in melanistic versus typical variants.

Read More about Dr. D'Orgeix's Research

The study of Slevin's bunchgrass lizard was conducted by <u>Dr. Christian d'Orgeix</u>, Avery Monroe, <u>Dr. Paul Kaseloo</u>, and Tatiana Weiford, with partial funding from the NSF under Cooperative Agreement No. HRD-1719504







## **Faculty Activities**

Dr. Xianfa Xie, Director of the VSU CeBiGeBi and Associate Professor in the Department of Biology, presented twice at the 3rd Joint Congress on Evolutionary Biology: "The Proper Role of Epigenetics in Evolution: Supplemental or Paradigm Shift?" and "Why Have Most of the Phylogenetic Analysis of COVID Virus Evolution Been Wrong?"

Dr. Xie attended the NIHfunded Genomic Data Science Community Network (GDSCN) Symposium at the University of Puerto Rico at Aguadilla with Community members, NIH officers, a guest speaker from Harvard Medical School & guest visit from the <u>UPRAg</u> Provost.

**Read More about the CeBIGeBi Center** 

Dr. Xie served as an SSE Diversity Committee officer, representing the committee and organizing workshops and social events at the 3rd Joint Congress on Evolutionary Biology.

