Office of Research & Innovation at Richard Bland College of William & Mary



The U.S. National Science Foundation (NSF) is investing \$19.6M in emerging research institutions to grow their capacity to participate in regional innovation ecosystems.

#### \$7.0 MILLION IN GRANTS

Research is on the rise at RBC with funding pouring in from over \$29 Million in grant proposals.



# **RUOPENG WU**

OFFICE OF RESEARCH & INNOVATION FORMER STUDENT INTERN

### Transfer University of Michigan

"I think it was a good idea to spend the first two years at Richard Bland College.. I got the opportunity to save money and have time to explore what field I was interested in."

FORMER ORI REASEARCH ASSISTANT



### ORI'S STUDENT INTERNSHIPS INSPIRE CAREER INTERESTS

The Office of Research & Innovation at RBC identifies and engages talented RBC students with valuable experiences that advance student-competancy as aspiring professionals in their areas of study.



rbc.edu

### **RBC RESEARCH**

REVIEW MAGAZINE FOR RESEACH AND INNOVATION



New Academic Innovation Center at Richard Bland College of William & Mary



**NEW TECHNOLOGY**ORI makes virtual reality a reality at RBC.

**INNOVATIONS PROJECT** 

and Marketing Outreach

Grant to fund virtual

Mobile Communications

Project.

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### Welcome Message



### **OFFICE OF RESEARCH & INNOVATION**

elcome to RBC Research Review Magazine, your source for news and information for the Office of Research & Innovation at Richared Bland College of William & Mary. As one of the top 2-year school leaders in research in the Commonwealth of Virginia, we urge you to peruse the magazine to explore the various ways that ORI is touching the lives of our students and working with community partners.

Our commitment to increasing research and innovation is unparalleled. Richard Bland College provides students with a world-class education to prepare them for success in their future endeavors. An unapologetic commitment to inclusion and diversity is fundamental to achieving our mission as we continue to foster an environment where all individuals are valued and respected.

Please consider a campus visit if you are curious about academic programs at RBC. Faculty and staff enthusiastically help students reach their academic goals. ORI aggresively pursues partnerships that advance engagement, innovation and STEM career success.

Together, we can create a brighter future for every student, for our community, and for the world.

#### KIMBERLY BOYD, Ph.D.

Vice President/Cheif Reasearch & Innovation Officer

# RICHARD BLAND COLLEGE

### NAMES DR. KIMBERLY BOYD

### **VICE PRESIDENT**



r. Kimberly Boyd, who has two decades of academic and administrative experience in higher education at prominent institutions throughout the Commonwealth, has been named Vice President at Richard Bland College of William & Mary. The announcement was made by Dr. Debbie L. Sydow, President of RBC. Dr. Boyd joined RBC in January 2022 as the College's Chief Research and Innovation Officer, and she will retain responsibility for that area in addition to oversight of academics and student success.

Dr. Boyd arrived at RBC from Hampton University where she served as Chairperson of the University Psychology Department. Prior to Hampton, she served as the Interim Assistant Dean of the College of Natural and Health Sciences, Chairperson of the Psychology Department and Director of the Ph.D. Health Psychology, Behavioral and Community Health Sciences Program at Virginia State University. Dr. Boyd also served as Vice President of Administration at the VSU Research Foundation.

"Dr. Boyd brings an innovative approach and entrepreneurial spirt to her new role as Vice President," said Sydow. "Richard Bland College is fortunate to have her in this new leadership role to help lead strategic initiatives at a critical time in the College's evolution." said Dr. Boyd. "I am eage alongside President Sydomembers of the RBC and community to lead the Commun

Dr. Boyd has received grant funding from multiple federal government agencies that include the Department of Justice, Substance Abuse and Mental Health Services Administration, Office on Women's Health, United States Department of Agriculture, Department of Homeland Security, and the National Science Foundation. Her community based par-

ticipatory research includes student efficacy towards STEM, HIV/AIDS, mental health, substance abuse, violence prevention and mindfulness.

"It is an honor to have been asked to serve in this capacity at RBC," said Dr. Boyd. "I am eager to work alongside President Sydow and members of the RBC and extended community to lead the College to a new level of excellence."

to help lead strategic initiatives at a critical time in the College's evolution."

Before entering the academic arena, Dr. Boyd worked for more than a decade as a Deputy Branch Chief, Behavioral Scientist, Research Psychologist, Public Health Analyst and Grants Management Specialist at the Centers for Disease Control and Prevention.

Dr. Boyd earned her B.A in Psychology from Spelman College, and a M.A. in Counseling Psychology from GA School of Professional Psychology. She earned a second M.S. and PhD in Social Psychology from Virginia Commonwealth University.





### RESEARCH ON THE RISE





n the rural areas of Dinwiddie and Prince George Counties that make up the Richard Bland College of William & Mary (RBC) campus, students may soon be bound for one of the largest island nations in the world and professional opportunities as limitless as the skies.

RBC is allowing students to interact with new environments while preparing them for emerging careers through the increased use of computer-generated simulations known as virtual reality.

"In polling our students, RBC learned they were interested in the future of virtual reality, job opportunities and training with our industry partners and connections with four-year colleges and universities," said Kimberly Boyd, Ph.D., vice president and chief research and innovation officer at RBC. "This in turn, offers support to our comfill positions."

According to Boyd, virtual reality is at the core of various research projects launching or in development at RBC.

#### VIRTUAL REALITY IS TAKING OFF

Through a new partnership with Richmond International Airport

### By Amy Lacey

(RIC), RBC is helping to build a workforce of aircraft technicians, pilots and other positions in the aviation industry. It is designed to build interest among high school and college students to meet employment needs. RBC plans to utilize virtual reality workshops with flight simulations to engage students on campus.

Boyd explained that RBC, as a twoyear institution with on-campus housing, offers the ideal setting to enroll a diverse body of students.

"High school students can stay for the summer to participate in this program and use technology to imagine themselves in one of these roles," said Boyd. "We also have college students on campus who may choose to work at the airport while taking classes two days a week. The future goal of this program is to munities with a skilled workforce to offer classes in associate of science degrees related to the program."

> "We are excited about working with **RBC** through our Aviation Reaching Communities (ARC) project," said Perry Miller, chief executive officer at RIC. "This partnership will offer dual enrollment, summer programs, research, certifications and stackable credentials that lead to viable pathways in the aviation industry."



#### FROM RBC TO BACHELOR'S DEGREE

The RBC Virtual Reality program is scheduled to begin in 2024 with a new Mental Health Internship under its umbrella.

Through the internship, 20 students will work alongside both RBC psychology professors linked to mental health research and off campus partners at Virginia Wesleyan University (VWU) and Virginia State University (VSU).

"The internship will utilize virtual reality for mindfulness training and meditation to assist individuals with reducing stress and anxiety," Boyd said. "The pandemic created COVID-traumatized students (CTS) who need support to get back on track with their schooling. Interns will put them in a soothing environment to calm their minds in an effort ultimately to improve academic performance."

Mental Health First Aid, a course that teaches individuals how to address mental health and substance-use issues in crisis and non-crisis situations, will also be a part of the curriculum.

RBC Mental Health Interns will then have the option to continue their education at VWU or VSU.

"Once they complete the RBC Mental Health Internship, the students can work towards their bachelor's degree in psychology and continue as mental

health interns at VWU or VSU," explained Boyd. "We are excited to offer students this new pathway from RBC."

#### PATHWAY TO GLOBAL RESEARCH

RBC is working on phase two of a proposal under the U.S. Department of State's Increase and Diversify Education Abroad for U.S. Students (IDEAS) program with the international nonprofit, World Learning.

If selected for the grant funding, RBC students would travel to Madagascar to conduct research in collaboration with Sadabe, a non governmental organization that manages the protected forest area of the Tsinjoarivo-Ambalaomby.

"Students would develop their project on RBC's campus with virtual reality and then travel to Madagascar to work with the team there," said Boyd. "Our students would help to strategize sustainable development and limiting threats to natural ecosystems and biodiversity."

Boyd added, "While RBC already hosts international students on our campus, we are looking forward to offering opportunities for our students to study abroad."

#### **GROWTH OF STEM PROGRAMS**

RBC is in preliminary proposal discussions with the National Science Foundation (NSF) Enabling Partnerships to Increase Innovation Capacity (EPIIC) program. The grant would fund capacity building around STEM and provide students with opportunities in high-tech and innovative fields through career exploration, development and the translation of research to practice.

"We want to grow STEM programs at RBC that produce a continuing cadre of underrepresented students qualified to enter four-year educational institutions and the workforce," Boyd said.

"RBC plans to utilize virtual reality workshops with flight simulations to engage students on campus," said Dr. Boyd.

The NSF funding would assist with building capacity and engaging partners from local school districts. The program would complement one RBC will offer in July 2023 for Petersburg City Public Schools (PCPS) in partnership with RIC, Amazon and DroneUp, a company establishing drone delivery services for clients.

"I'm delighted that PCPS students will have the opportunity to learn and grow with the support of RBC," said Tamara Sterling, Ed.D, superintendent of PCPS.

The NSF funding would also allow RBC to evaluate the success of a consortium to address STEM performance issues, develop intervention modules to increase performance and attempt to create a new community culture regarding STEM.



# RBC FACULTY RESEARCH FUNDING RECIPIENTS

avid Morgan, Ph.D. (Physics)
3-D Visualization in Science & Math

ary Gurnik, Ph.D. (Chemistry)
Radio-Carbon Dating

alota Stewart, Ph.D. (Math)
Advanced Technology Education

atie Bjorkman, Ph.D. (Math & Drones)
Advanced Technology Education



### **\$694,000 AWARDED** FOR COVID STUDENT SUPPORT

hen the novel coronavirus pandemic shut down education in March 2020, Tori McArtis could never have predicted just how off course she would get in her pursuit of a psychology degree.

COVID impacted me in many ways," recalled McArtis, who was then a freshman at Virginia State University (VSU). "I had to go home in the middle of my spring semester. I had to quit my summer job to protect myself and my family from getting sick. Even though I felt like I did everything I could, I still ended up contracting COVID that year."

Dr. Kimberly Boyd, Ph.D., Vice President and Chief Research and Innovation Officer at Richard Bland College of William & Mary (RBC), heard similar stories from individuals who wrestled with the pandemic while continuing their studies at institutions of higher learning.

"These are traumatized students," described Dr. Boyd. "Because of COVID, some couldn't return to school; others had death in the family; some caught COVID

themselves. If their grades went down or they failed, they couldn't apply for financial aid. No financial aid means you can't afford college anymore – all very traumatizing"

Knowing COVID posed unprecedented educational and emotional challenges, Boyd anticipated there would be a massive call for help. Boyd was a sounding board for students on the RBC campus and had regular conversations with leaders at VSU, Virginia Commonwealth University, Hampton University, and the College of William & Mary.

Using insight from her communication with them and encouragement from RBC President Dr. Debbie L. Sydow, Ph.D., Boyd developed the CTS component to be linked to the RBC Guided Pathways to Success (RBC-GPS), a program offering recruitment, engagement, and support services, along with educational and training pathways for COVID traumatized students (CTS).

RBC secured one-time funding of \$694,000 from Senator Warner and Senator Kaine for students at Richard Bland College from Petersburg, Dinwiddie, Prince

### By Amy Lacey

George, and Hopewell Counties to participate in the College's Guided Pathways for Success program that provides services, education, training, and job placement support for students from rural areas, underrepresented Science, Technology, Engineering, and Math (STEM) groups, and students highly impacted by the COVID pandemic.

"I wrote this grant from the heart," said Boyd. "I wrote this grant for the community. What does this community need? I wrote this grant after listening. I listened and tried to be that solid ear for so many students who were hurting."

Through this program, RBC will offer several pathways to assist students with getting back on track. The first path focuses on getting students from high school to move forward to college. This path allows students to complete two to four classes at RBC to assist them with moving forward to college if they are a high school senior or students without a home school.

The second path allows students to complete two to four classes at RBC to assist them with returning to their two or four-year Virginia institution.

"A lot of colleges kept a COVID withdrawal form, but now students are in the predicament that they cannot go back because they lost their financial aid," Boyd relayed.

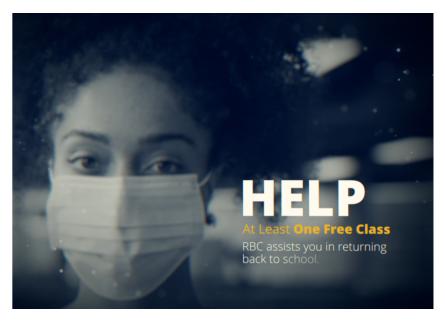
The third path is designed "If students decide after their classes with us that they do not want to go back to their first school, they can stay at RBC." This RBC-GPS path gives individuals an opportunity to enroll in RBC's Federation for Advanced Manufacturing Education (FAME); it combines coursework to earn an associate degree with paid, on-the-job training and experience.

On the third path, RBC faculty, staff and students will also work on job readiness and attainment through a partnership with Job Corps, the country's largest residential career training program.

Each path also addresses mental health needs triggered by the pandemic; the isolation of remote learning and social distancing created high levels of stress, anxiety, and depression.

"The mental health part of the program is so important to me," Boyd explained. "When students come into the program, we use positive psychology, mindfulness techniques and mental health first aid, to make sure we are helping them, truly helping them. Think about it, the world was turned upside down. Some of them still don't know how to get back up."

"All of the upperclassmen have been affected by COVID in some way," McArtis recognized. "It caused me to have to take my sophomore year online and at home. Online classes are very challenging especially when the professors are not used to having their classes online."



RBC-GPS will support a minimum of 100 individuals. Through this program and others "we hope to positively impact the community and build the workforce by having manufacturing jobs through FAME," Boyd said. "Also, DroneUp is now at RBC to teach students how to drive unmanned systems. These are tomorrow's jobs available to GPS students. Walmart and DroneUp will deliver packages, and students can get an education on our campus to operate the drones."

"I wrote this grant from the heart," said Boyd. "I wrote this grant for the community," said Dr. Boyd.

Currently, RBC enrolls approximately 2,400 students, with 59% considered low-income and Pell Grant recipients. Of those individuals, 42% identify as African American; another 30% of RBC students are Caucasian, while 26% are Native American or Asian.

"Most RBC students are from the cities of Petersburg, Colonial Heights and Hopewell or the

counties of Chesterfield, Dinwiddie, and Prince George. These rural communities, which have fewer options for mental health services, will benefit from the resources provided by RBC-GPS," said Boyd. "This program is designed to assist students with getting back on track. I believe in all of our students and want them to have a fair chance that COVID took away for many students" she explained. "So many times, during COVID, I would talk to them and realize this one lost a mother, or they had COVID themselves. Just the trauma behind it

As RBC prepares to welcome its first students in 2023, Boyd already envisions it as a model for other schools.

"As they realize the benefits of this program, they can start their own. I can see it moving around the state of Virginia with various tracks to jumpstart education post-COVID," predicted Boyd. "In my career, I have always worked to give students what each individual needs to move forward. Not just focus on the academics but the person. RBC continues to do just that."

#### **NEW GRANTS**



### **\$3.4 MILLION AWARDED**

### FOR RESEARCH PROJECT

ichard Bland College of William & Mary (RBC) will receive more than \$3.4 million in grant funding from the State Council of Higher Education For Virginia (SCHEV) to support its REACH4 (Rural Engagement, Achievement Center for Hope, Happiness, Harmony, and Healing) Project. The REACH4 Project will provide grants and scholarships, paid student internships, work study and experiential learning opportunities to Pell-eligible and low-income students to attract and propel them to success at RBC and beyond. The initiative, which will launch in fiscal year 2025, is a continuation of RBC's efforts to attract and propel firstgeneration, underrepresented, underserved and rural students.

"The College is ecstatic about this paramount opportunity to better

serve our unique student population," said Dr. Kimberly Boyd, Principal Investigator, Vice President and Chief Research & Innovation Officer at RBC.

Roughly three out of every five students at RBC are Pell-eligible, which means they display exceptional financial need and have not yet earned a degree of higher education.

One of the main REACH4 Project objectives is to develop targeted collaborative recruitment and engagement efforts with high school districts designed to increase the size and participation of the initiative's diverse student population. The project will introduce an on-campus multidisciplinary, cross-department, supportive learning environment with collaborative research teams to immerse students in STEM education and

### By Sterling Giles

workshops.

The grant, in conjunction with RBC's BOT (Back On Track) program, will bolster outreach, marketing, communication and engagement of the aforementioned student populations. BOT, which is funded by the U.S. Department of Labor, Employment and Training Administration, offers stress management, mental health care and workforce development support to local high school and college students impacted by the COVID-19 pandemic.

This grant was made possible by the Virginia Plan, the Commonwealth's strategic effort to advocate for and empower low-income and Pell-eligible students pursuing higher education. Please contact Dr. Kimberly Boyd at kboyd@rbc. edu to receive more information about the REACH4 Project.

#### **NEW GRANTS**

### **IDEAS PROGRAM AWARDS**

### RBC GRANT FOR STUDY ABROAD

ichard Bland College of William & Mary is one of 34 U.S. colleges and universities in 28 U.S. states to be awarded a grant from the U.S. Department of State's Increase and Diversify Education Abroad for U.S. Students (IDEAS) Program, which aims to develop and expand study abroad programs around the world. Of the 34 U.S. colleges and universities, eight are community colleges and 13 are minority-serving institutions. The selected proposals will develop new international partnerships, train faculty and staff, internationalize curriculum, engage diverse students in study abroad, broaden the destinations where U.S. students study, and create virtual and hybrid exchanges. The IDEAS Program contrib-

utes to the State Department's diversity, equity, inclusion, and accessibility efforts to engage the American people in foreign policy.

"Increasing and diversifying U.S. students going abroad for educational opportunities, as well as diversifying the places where they study, is a State Department priority," said Lee Satterfield, Assistant U.S. Secretary of State for Educational and Cultural Affairs. "This year's recipients reflect the true greatness of America – our diversity – as almost 25 percent represent two-year institutions, 40 percent represent minority-serving institutions, and 25 percent represent rural-serving institutions.

"This is a fantastic experiential learning opportunity for RBC's

faculty and students," said Dr. Kimberly Boyd, Vice President of Richard Bland College of William & Mary. "Everyone here is ready to engage through research and service, with both our local and international community partners. Dr. Katie Heffernan, our faculty lead for Madagascar, is involved in this new program design."

Since 2016, the IDEAS Program has awarded 179 grants to 173 U.S. colleges and universities in 49 states and territories to create, expand, and diversify their U.S. study abroad programs in 71 countries across all world regions. In addition to the IDEAS grants, the program offers opportunities for international educators at U.S. colleges and universities to participate in free virtual and in-person study abroad capacity-building activities.

The IDEAS Program is a program of the U.S Department of State with funding provided by the United States Government and supported in its implementation by World Learning. For a full list of 2023 IDEAS grantees, as well as information on upcoming IDEAS webinars and workshops, please visit www.studyabroadcapacitybuilding.org.

"Increasing and diversifying U.S. students going abroad for educational opportunities, as well as diversifying the places where they study, is a State Department priority," said Lee Satterfield, Assistant U.S. Secretary of State for Educational and Cultural Affairs.



#### **NEW GRANTS**

### RICHARD BLAND COLLEGE AWARDED COLLABORATIVE \$1.6 MILLION NSF FUNDING

U.S. National Science Foundation (NSF) Invests \$400K in Richard Bland College of William & Mary

he U.S. National Science Foundation (NSF) is investing \$19.6M in emerging research institutions to grow their capacity to participate in regional innovation ecosystems. Richard Bland College of William & Mary is officially one of those NSF recipients.

"RBC's Research & Innovation Department will receive training and support for 3 years to build more inclusive regional ecosystems and potentially connect to NSF Regional Innovation Engines," says RBC Vice President & Chief Research & Innovation Officer. The U.S. National Science Foundation announced the first-ever Enabling Partnerships to Increase Innovation Capacity (EPIIC) investment of \$19.6 million to nearly 50 teams at U.S. institutions of higher education, including teams from historically Black colleges and universities, minority-serving institutions and community colleges. Each institution will receive up to \$400,000 over three years. RBC has received that maximum \$400k amount, one of only two colleges in Virginia to be awarded funding.

Through this investment, RBC will





#### MILLION IN GRANT FUNDING

\$7 million in federal and state grant funding for the Office of Research & Innovation at Richard Bland College of William & Mary supports community driven projects that touch the lives of students while building community partnerships.





"This funding advances not only RBC's core mission but also its strategic priorities," said Dr. Debbie L. Sydow, President of Richard Bland College of William & Mary.



receive support to develop capacity and institutional knowledge to help build new partnerships, secure future external funding and tap into regional innovation ecosystems, and potentially into an NSF Regional Innovation Engine(NSF Engine) or an Economic Development Administration Regional Technology and Innovation Hub (EDA Tech Hub).

"NSF aspires to accelerate the nation's research and innovation enterprise and empower all Americans to participate in the scienceand technology-driven workforce," said Erwin Gianchandani, NSF assistant director for Technology, Innovation and Partnerships (TIP). "EPIIC reinforces NSF's commitment to develop new, inclusive innovation ecosystems by connecting diverse networks of partners to work together to drive the expansion of key technologies — and the technology workforce — in the U.S. and in turn address pressing national, societal and geostrategic challenges."

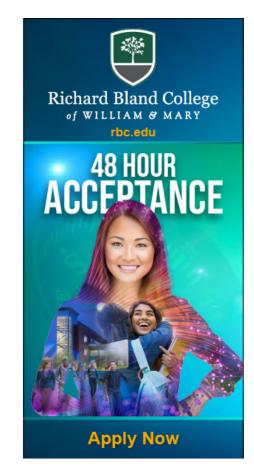
Launched by the TIP Directorate, EPIIC works with institutions interested in growing external partnerships and building innovation capacity.

"This funding advances not only

RBC's core mission but also its strategic priorities," says Dr. Debbie L. Sydow, President of Richard Bland College of William & Mary. "This STEM initiative creates both inclusive and engaging learning environments that improve the quality teaching and learning at our institution."

NSF recognizes that many institutions, including MSIs, small academic institutions and two-year institutions, stand to benefit from additional focused support for the infrastructure and resources needed to grow external partnerships and to tap into innovation ecosystems, including engaging with NSF Engines and EDA Tech Hubs

"NSF recognizes that institutions with limited research capacities require comprehensive support to become equitable partners in their regional innovation ecosystems," said Thyaga Nandagopal, director of TIP's Division of Innovation and Technology Ecosystems. "This funding aims to set EPIIC awardees on level ground to seek and build lasting partnerships to tap into their innovation potential, and the capacity-building efforts will continue to provide significant innovation partnership opportunities well into the future."



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"NSF aspires to accelerate the nation's research and innovation enterprise and empower all Americans to participate in the science- and technology-driven workforce," said Erwin Gianchandani, NSF assistant director for Technology, Innovation and Partnerships (TIP).



# ORI EXPERIENTIAL

LEARNING OPPORTUNITIES

### Utah Paleo Dig

Understanding Fossil Formation
Identifying Fossil Types

Field Excavation **Techniques** 

Stratigraphy and Dating

Contextualizing Fossil Finds

Katie Hefferman, Ph.D.

Eric Miller, Ph.D.

**10 Students** 

## New York Experiential Learning Opportunities

Theatre **History Exploration**Architectural **Significance**Cultural **Context in Art** 

Cultural **Impact in Sculpture** 

Jamia Hines Davis, Ph.D.

**10 Students** 

### Madagascar Study Abroad Design

**Diverse Study** 

**Abroad Program** 

**Create** Global

Leadership Program

Develop

Collaborative Project

3 RBC Administrators

### Miami Clinical Skills Set-up

Study **Assessment** 

**Diagnostics** 

Crisis Intervention

**De-escalation** 

Nursing **Leadership** 

Marcina Porterfield, Ph.D.

The Office of Research & Innovation at Richard Bland College of William and Mary offers experimental learning opportunities for faculty, staff and students, engaging them in hands-on experiences and reflection to connect theories and knowledge in real-world situations both nationally and globally.

RBC RESEARCH REVIEW RBC RESEARCH REVIEW 23







Richard Bland College of William & Mary is pleased to announce that it is the recipient of a \$300,000 Department of Justice (DOJ), Office ensure that RESPECT is empowon Violence Against Women (OVW) grant to reduce Domestic Violence, Dating Violence, Sexual Assault, and Stalking (DVSAS) on campus. RBC will create RESPECT, a comprehensive program to strengthen prevention education, bystander intervention training, and victim services with a collaborative effort of campus personnel, off-campus partners, and off-campus consultant resources, a Coordinated Community Response Team (CCR).

The grant was written and brokered by Kimberly Boyd, Ph.D. - Vice-President and Chief Research & Innovation Officer at RBC. Her office is RBC's hub for research grants at the college. "We hold a commitment at RBC to making the world a better place for others," says Dr. Boyd. "This grant represents ideals fundamental to our mission."

Dr. Debbie L. Sydow, President of RBC adds, "The goal of RESPECT is to reduce or eliminate DVSAS incidents and to offer trauma-informed services to victims with support for long-term healing. The intended outcome is that students will continue to build safe, diverse and welcoming environments throughout their lifetime."

The project will work with surrounding RBC communities to engage committed partners to ered to accomplish the following objectives:

- 1. Create a Coordinated Community Response Team to accomplish all mandated tasks including: prevention education, bystander intervention, training for campus, community and victim services.
- 2. Provide prevention education for the entire campus:
- a. Mandatory prevention education for all incoming students about DVSAS.
- b. Prevention education for all students incorporating awareness, cultural sensitivity, bystander interventions, information about resources, campus policies and procedures.

The initiative will continue to work closely with Dr. Evanda Watts-Martinez - Director of Counseling Services, Thomas Travis - Director of Campus Safety & Chief of Police and Stacy Sokol - Director of Continuing Education at RBC. They will compose the RBC team, serving as the coordinated internal response

### \$300K AWARDED



"We hold a commitment at RBC to making the world a better place for others," said Dr. Boyd. "This grant represents ideals fundamental to our mission."

### Meet Our New Research Psychologist



### JENNIFER VAN SCHOICK, PH.D.

# AN ASTUTE RESEARCHER OF THE MIND

An accomplished scientist with a heart for vulnerable minds.

Over the last few years, Richard Bland College of William & Mary (RBC) has leaned in to becoming a beacon for STEM-H (Science, Technology, Engineering, Math and Health Sciences) innovation. A testament to this is the college's aptly named Academic Innovation Center (AIC) set to open this fall.

Over the last several months, RBC sought out premier talent across the Commonwealth to lead programs and coursework at the center. Psychology researcher Jennifer Van Schoick, Ph.D. was one that rose to the top. "Her research complements what we're doing at the AIC," said Dr. Kimberly Boyd, Principal Investigator, Vice President and Chief Research & Innovation Officer at RBC. "She fits a missing piece to our pie not only from a physiological standpoint, but also from a team and engagement standpoint.

"She's very personable, she's very thoughtful and I just think she's going to be an excellent fit for Richard Bland College."

Van Schoick, whose official title at the college is Research Psychologist, will teach and conduct

### By Sterling Giles

research revolving around behavioral science, physiological psychology and psychodrama. She is ecstatic about the learning and research that will take place in the AIC and beyond.

"I would love to get a handful of students that would like to be mentored and that would like to have experience in the lab working with EEG (electroencephalogram), with physiological data [and] mixed method studies," she said.

Van Schoick will be introducing her first course, Behavioral Neuroscience, this fall. Students will study brain anatomy and plasticity, as well as learn research methodologies.

Van Schoick's upbringing played a large part in her pursuing her field of study. Her family—plagued by substance abuse, addiction and mental health disorders—inspired her to study the mind. Over the course of her decades-long career, she's learned in recovery journeys "it comes back to wellness, wholeness and holistic approaches."

Van Schoick and Boyd previously crossed paths at both Virginia State University (VSU) and Hampton University. As her doctoral professor at VSU, Boyd guided Van Schoick and her classmates on community health campaigns addressing various issues such as mental and sexual health, as well as addiction. Van Schoick's specific focus was addiction and trauma interventions. Also during her time at VSU, Van Schoick served as a Physiological Psychology instructor and received her Ph.D. in Health Psychology.

At Hampton, Boyd hired Van Schoick to come on as Assistant Professor of Physiological Psychology. Namely, she implemented psychodrama workshops—a form of psychotherapy in which participants act out events from their past—in her teaching. It was a hit amongst her students.

"It's where theater meets therapy," Van Schoick said. "There's no right or wrong—it's their story.

"It doesn't leave out their spiritual beliefs, it doesn't leave out their experience, skin color or culture."

Van Schoick understands the importance of diverse representation in her research processes. Several years ago, she conducted a study on the victims of intimate partner violence (IPV). The participants were African-American and white women.

She enlisted her colleague, Courtney Leeks, an African-American woman and licensed therapist, to undergo the study with her. Van Schoick anticipated the conversations would differ amongst the study groups, but she was floored by the learnings she and Leeks received.

"Many women faced substantial challenges in accessing safe assistance for both IPV and addiction," Van Schoick said.

"Particularly troubling were the additional barriers encountered by African American women, who often experienced discrimination and abuse within supposed safe havens." Despite the harsh reality many of these women faced, the duo reaped the benefits of fostering a safe space for honest conversation to later develop sustainable, holistic solutions. Van Schoick and Leeks identified protective factors within the community that could help the women, such as trained spiritual leaders and support programs.

The culmination of these experiences, research and workshops, has equipped Van Schoick to serve RBC's and the Greater Petersburg Region's unique populations. Cultural sensitivity and inclusion are always at the forefront of Van Schoick's mind, especially with her research.

She is excited about the potential of the AIC, but she's even more excited about the students she will be working with.

"I think at the heart of it for me is to make connections with students," she said. "They are the key to the future."



# \$1 MILLION GRANT FUNDING FOR MOBILE ENGAGEMENT



he State Council of Higher Education for Virginia (SCHEV) recently bestowed the Office of Research & Innovation at Richard Bland College of William & Mary with a \$1 million grant to fund its virtual Mobile Marketing and Communication Outreach Project. The vehicle will double as a center for career discovery and exploration and will primarily serve first generation, rural area and non-traditional adult learners.

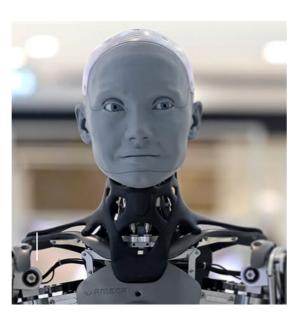
"The mantra of this initiative is 'We come to you,'" said Jesse Vaughan, Chief Communications & Marketing Officer at RBC. "We're meeting learners where they are to have engaging and insightful sessions with state-of-the-art technology and resources."

Chief Enrollment Management Officer Justin May, Chief Communications & Marketing Officer Jesse Vaughan and Dr. Boyd will be running point on the project.

May will handle admissions and enrollment, which entails distributing resources and information, as well as offering virtual tours of the college campus. Vaughan will craft a multi-faceted recruitment campaign to reach residents in rural and underserved communities. Lastly, Dr. Boyd will lead virtual reality, mobile artificial intelligence and aviation & drone demonstrations, mindfulness activities, as well as conduct research for the initiative.

In the near future, the college will collaborate with community and workforce development partners to support the initiative and to foster a pipeline of STEM-H (Science, Technology, Engineering, Mathematics and Health Sciences) professionals.







scheduled to engage the attendees.

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# ANA CONNER: AN RBC ALL-STAR

By Sterling Giles

pon graduation in June, Conner will graduate No. 4 in her high school class of roughly 400 students, as well as receive her associate's degree from RBC. She majored and minored in biology and psychology respectively. In addition to being a star in the classroom, she also advocates for women's and children's rights and well-being. It breaks her heart to see the most vulnerable populations being mistreated and underserved the most.

"In the future, a long-term goal of mine is to establish a safe haven for those experiencing crises," Conner said.

Conner, 18, empathizes with children who grow up in less-than-ideal circumstances because she had to endure the same. At a young age, she was in the middle of a tumultuous custody battle between her parents. But the hardship was a blessing in disguise because her father eventually married Samantha Boswell, who Conner heralds as her greatest influence and supporter.

"She's always there for me," Conner said. "My stepmom is always looking out for me, making sure that I'm okay, making sure I feel appreciated, and that I'm doing well.

"I think it's really good for a teenage girl to have a woman to look up to."

This support and care did wonders for Conner's self-esteem and inspired her to grab life by the reins.

Conner, who attends Prince George High School, decided to enroll in the Dual Enrollment Program at Richard Bland College of William & Mary (RBC). Despite her initial anxiety about college coursework and culture, as well as often being the youngest person in the room, she's held her own. She's even tutored students who are several years her senior.

"It was definitely intimidating because I started here at 16," Conner admitted. "And some of the people that I am tutoring are like 21 to 24 years old.

"But nobody in the academic setting, professors or anybody, treated me any differently."

During her time at RBC, Ana has learned more about diverse and international cultures, as well as the challenges those populations face.

"I got opportunities with my internship [with the Research & Innovation department] to work with international students," Conner said. "One of the interns was from China and the other intern was from Azerbaijan.

"I had great conversations with them about their country's politics and history and how that all plays a role in how they live. Talking with these people is the best way to learn. There are very, very different people on this campus and I wasn't exposed to them before—especially international students."

Through her studies and working under the RBC Vice President and Chief Research & Innovation Officer Dr. Kimberly Boyd, Conner has learned about health disparities within the African-American community as well.

"I've been educated about Black maternal and child health, and African-American women and their contribution to obstetrics and gynecology," she said.

Dr. Boyd and Dr. Marcina Porterfield, Conner's direct supervisor, sang Conner's praises for her diligence as a researcher and advocate.

"Ana has been a stellar intern embracing each opportunity here at Richard Bland College," Dr. Boyd said. "She is highly motivated, independent, intellectually curious, and productive.

"Her passion for the work is evident and we can't wait to see the inevitable strides she's going to make in her career."

"It's been a pleasure working with Ana on the Maternal and Child



Health initiative because of her diligence and willingness to learn," said Dr. Porterfield, who leads the MCH initiative on campus.

Despite her community health inclination, Conner is also a lover of music and the arts. She is currently enrolled in an introduction to rock class at RBC. She's learned Black people have not only been trailblazers in the field of medicine, but in music as well. These learnings have helped expand her worldview.

"I think it just helps you not only to be a smarter person academically, but it helps you to have a higher emotional intelligence and better awareness," she said.

Conner has even starred in a handful of RBC commercials—some have aired during the Super Bowl.

The uniqueness and benefits of the RBC Dual Enrollment program, as well as RBC's culture resonated with Conner.

"I've met a lot of really good people who want to see me succeed and

who are willing to help me succeed," Conner said.

Post-graduation Conner plans to continue her tenure at RBC for one more year and then hopes to transfer to her dream school, Johns Hopkins University. From there, she would like to pursue a career as a labor & delivery nurse or obstetrician-gynecologist.

This summer, she will participate in RBC's Summer STEM Camp and advise students as they engage with drone and virtual reality technology, as well as mindfulness and mental health training.

It's only the beginning for Conner. She can't wait to make an indelible impact on her community and beyond.

"I really want to be remembered as someone who stood up for women's rights and advocates for young women and young moms," she said. "And I want young people to be inspired to do big things, even if they're scared."



# ORI EXPERIENTIAL

More LEARNING OPPORTUNITIES

### Orlando, FLA Aviation Symposium

Analyzing **Aviation Trends**Economic **Global Factors** 

Regulatory **Changes** 

Aviation **Safety** 

Career **Paths** 

Ruopeng Wu Ruokun Wu

**RBC Students** 

# London Experiential Learning Opportunities

Global AI **Engagement** 

Critical **Thinking** 

Cultural **Context in Literature** 

Cultural Impact in drama

Kim Boyd, Ph.D. Marcina Porterfield, Ph.D. Jesse Vaughan

Dr. Alice Hinton David Majewski, MFA

# Baltimore John Hopkins Research

Study **Science Innovat**ion

Academic Culture

Examine **Student** Life

Urban Setting Influences

Ann Ifekwunigwe, Ph.D. RBC Students

## Princeton University Transfer Research

Academic **Assessment** 

Campus Culture

Historical Features

Resource Study

Financial Aid

Ann Ifekwunigwe, Ph.D. RBC Students

The Office of Research & Innovation at Richard Bland College of William and Mary offers experimental learning opportunities for faculty, staff and students, engaging them in hands-on experiences and reflection to connect theories and knowledge in real-world situations both nationally and globally.





### **WORLD-CLASS AMBASSADORS**



# uopeng and Ruokun Wu are twins in every sense of the word. For practically their entire lives, the brothers have gone to the same schools, attended the same institutions of higher learning and have similar hobbies and interests. But somehow, they still manage to get along swimmingly.

In 2017, the duo were uprooted from their hometown of Beijing, China and sent stateside by their family to get the best education possible. They paired with a host family in New Jersey and attended middle and high school in Jersey and New York respectively. From there, the brothers matriculated at Richard Bland College of William & Mary (RBC). They considered attending four-year universities but RBC's affordability and guaranteed admissions program to the Commonwealth's top four-year universities won them over.

"I think it was a good idea to spend the first two years at Richard Bland College," Ruokun said. "We got the opportunity to save money and have time to explore what fields we were interested in."

The guaranteed admissions program was a sigh of relief for both the brothers and international students at the college.



"The international students can relax and don't have to be too nervous about their futures," Ruokun said. "They can just do their best and strive after their goals."

This isn't the norm for most international students at other colleges and universities. They're not only bearing the weight of expectations from their families back home, but they're also working tooth and nail to get into top universities, which isn't guaranteed. RBC removes this stress via its guaranteed admissions program, which empowers students to simply focus on performing at their best in the classroom.

Both Ruopeng and Ruokun felt supported by the college's staff and connected with their fellow students in the iRBC International Student Success Program, which supports the college's international students.

"RBC is a relatively small campus, so everyone knows each other and everyone knows what resources are available, so it's easier to access them here," Ruopeng said. "As far as accessibility is concerned, I feel RBC is better than Michigan because for my research I spend a lot of time sending cold emails to my Michigan professors."



"But at RBC, I knew the professors and I could just walk in and talk to them."

While at RBC, Ruokun and Ruopeng both majored in computer science (Ruopeng also majored in math). They were also very active within the college community.

Ruopeng and Ruokun served as international representatives for the Student Assembly. They were also the Coding Club president and vice-president, respectively. The brothers interned under RBC Vice President and Chief Research & Innovation Officer Dr. Kimberly Boyd and participated in various projects.

A standout experience for them was attending the Aviation Symposium in Orlando, Florida where they learned more about aviation, aerospace, and drones, as well as networked with professionals in the field.

"Ruopeng and Ruokun were fantastic interns," said Dr. Kim Boyd. "They are both diligent, intelligent, hard-working students who are model ambassadors of the iRBC International Student Success Program."

"I know they're going to make great strides in their future endeavors and impact the next generation of mathematicians and computer scientists."

The twins are both majoring in math at The University of Michigan. However, they're planning to splinter off into different fields of study for individual intrinsic callings.

In high school, Ruopeng needed emergency surgery on his broken jaw, but the doctors botched the surgery. He didn't feel heard or seen during the procedure and recovery process. He even had to return home to China to correct the malpractice.

"After that experience, I decided I wanted to be a doctor," Ruopeng said with conviction. "Because I'm not going to do these types of things to my patients."

On the other hand, Ruokun would like to become a programmer to use artificial intelligence (AI) to help bridge the gap for people, businesses, and organizations, particularly those with limited technological access and resources.

"I think it was a good idea to spend the first two years at Richard Bland College," Ruokun said.

"I want to invest in AI so I can create welfare for all of society," Ruokun declared.

The brothers have enjoyed their time so far at The University of Michigan. But they do miss RBC's modest, intimate campus and community. Even as Michigan students, they continue to show their RBC pride.

"Everyone here is wearing a Michigan shirt," Ruopeng said. "But I'm like 'No, I've got to wear my RBC shirt—I've gotta tell them I come from RBC."





