

IMAGINE

A newsletter for friends of the University
Libraries at Virginia Tech



SPRING 2019

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Welcome from the Dean

Dear friends of the University Libraries at Virginia Tech,

Spring is upon us! The Virginia Tech campus is beginning to bloom, and students are brimming with excitement about upcoming commencement and the beautiful days of summer ahead.

In this Spring 2019 edition of Imagine, the newsletter of the University Libraries, you will see stories of our many partnerships that span the university and beyond. University Libraries experts work with students and faculty across campus to virtually recreate World War I tunnels in the exhibit The Vauquois Experience, make data more valuable, teach students and faculty how to best showcase their work in ePortfolios, openly publish faculty and student authored books, and document and preserve the history of the company town of Fries, Virginia.

Between these pages, these are just a few of the stories you will find that exemplify the diversity of expertise, services, and opportunities to innovate and create in our 21st century research library at Virginia Tech. We have the space, emerging technology, and the resources to assist in the creation of new knowledge to better serve the Hokie Nation and our global society.

Join us as we continue to imagine and make reality the research library of the future by contributing to the Library Excellence Annual Fund. Your support makes a difference in providing faculty and students the library resources, technology, and expertise they need to do their best work.

Thank you to all of you who participated in the university's annual giving day and have supported the University Libraries throughout the year. Private support helps us create spaces where students can experiment with emerging technology and creatively collaborate to promote a cause or invent a product. Your support also offers us the flexibility to change as the university's needs change to advance research and learning at Virginia Tech.

Throughout all of the seasons at Virginia Tech, Hokies serve as a force for positive change through scholarship and innovation. We invite you to be a part of our mission and thank you.

All the best,

Tyler Walters, Ph.D.
Dean of the University Libraries
Virginia Tech



University Libraries receives grant to preserve history of company town Fries, Virginia

The University Libraries’ Special Collections department received a \$68,722 grant to preserve and make accessible decades of materials that tell the complex story of Fries, Virginia, and its textile mill.

Thanks to the grant from the National Historical Publications and Records Commission, the grants-making arm of the U.S. National Archives and Records Administration, Archivist Bess Pittman will spend a year processing the collection, organizing community events, and promoting the town’s history through outreach and exhibits.

The project, “They’re Closing Down the Textile Mill: Creating Access to the Fries Textile Plant Records at Virginia Tech,” illuminates the history of a small company town and its contributions to the American experience.

This spring, Pittman plans to host a small exhibit at the recreation center in Fries that will include a selection of materials such as foundational documents, photographs from company events, and correspondence with mill employees that illustrate life in Fries as well as the operations of the plant itself.

“I plan to collect oral histories at the spring event and add them to the collection to be available for listening at future events,” said Pittman.

“The plant operated for 85 years, employing multiple generations in the town and the surrounding area. This collection reflects the rise and fall of the entire American textile industry during the twentieth century,” said Aaron Purcell, director of Special Collections and co-principal investigator of the grant.

In 1903, Col. Francis Henry Fries founded the town of Fries and constructed the textile plant in Grayson County, Virginia. He was president of the family-owned Washington Mills Company and used his political and business influence to build a connection to the main branch of the Norfolk and Western Railroad and a dam on the New

River to generate power for the mill (Bond and Nichols, History of Fries).

“The Washington Mills Company owned nearly every building in town, which flourished in the early 20th century with a population of more than 1,700 by 1910,” said Purcell. During the early 20th century, entire families worked in the mill. “Employment at Washington Mills in Fries peaked after World War II with more than 1,200 workers. It was a major player in the textile mill industry with the latest equipment and technology to be had at the time.”

“This collection gives a unique perspective of the company town. This mill is the reason the town existed. It’s rare to have decades of payroll records, ownership records for employee residences, the sales records from the company store, and even maintenance records for public amenities the company built to keep the employees happy,” said Laurel Rozema, archivist in Special Collections and co-principal investigator of the grant.

As a result of increased international competition in the textile industry, the mill closed in 1988. In 2016, the Fries Town Council officially donated the 150 cubic feet of company records to the University Libraries’ Special Collections department.

“This grant gives us an opportunity to protect this singular snapshot of American history and make it available to the public in a way that is most useful to researchers, students, and interested community members,” said Rozema.

“It tells the story of the men and women who for generations worked tirelessly in the textile industry hoping to advance professionally and create better opportunities for their children,” said Purcell. “This collection reveals the effects of a globalized post-industrial society on hometowns across America.” ■

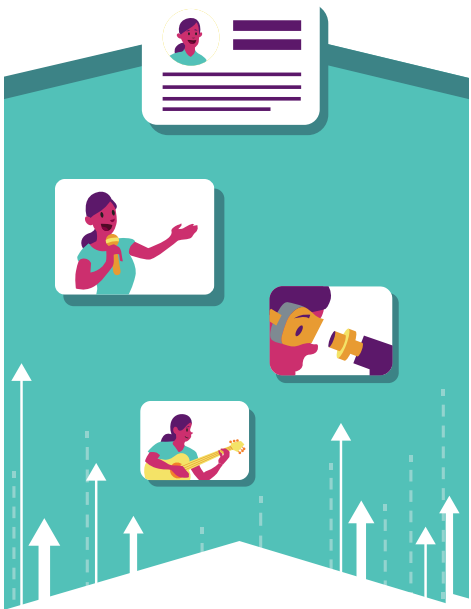
One of the youngest spinners, Hettie Roberts, in the Washington Mills Company textile mill, Fries, Va. The photo was taken by Lewis Wickes Hine in 1911. <https://www.loc.gov/item/2018674776/>

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This grant gives us an opportunity to protect this singular snapshot of American history

Laurel Rozema, archivist

Effective ePortfolios reach beyond the classroom to career success



DIGITAL PORTFOLIOS, ALSO KNOWN AS EPORTFOLIOS, are commonly used for showcasing work to be assessed by a professor for a specific class. According to published research by University Libraries Instructional Design and Training Manager Miguel Nino, academic institutions need to transform their assessment digital portfolio programs into ePortfolios that can be used for their students’ career readiness and employment.

In his article, From Assessment to Career Readiness: Revamping ePortfolios for Student Professional Development and Employment, published in the International Journal of Recording Achievement, Planning, and Portfolios, Nino said that assessment digital portfolios are extremely effective in documenting learning and providing evidence of learning outcomes, but are not effective when applying for jobs due to their format, length, and selection of projects. He describes the steps that need to be taken to transform an assessment portfolio into a career portfolio.

“The student should include items, such as design documents, project management plans, analysis documents, presentations, posters and infographics, digital stories, podcasts, research papers and essays, group projects, reports on internships or summer jobs, and a resume,” said Nino. “Hiring managers and recruiters only spend seconds browsing application materials, so the career ePortfolio should market the student in a way that quickly gains attention.”

Nino also said that the use of reflections in the career ePortfolio will show recruiters why the candidate is the best fit for a position and what assets they can bring to the team. The ePortfolio can also be linked to social media and digital networking to enhance a professional online presence.

“With the right strategies, these ePortfolios can be modified and tailored to be used for career purposes,” said Nino. “Career ePortfolios provide evidence of growth, development, and the learning journey of an individual. They are able to tell stories and demonstrate how a person can change due to knowledge, skills, and abilities acquired throughout time.”

He said that the reflective component of

ePortfolios linked to specific projects makes them true testimonies of how learning can shift the human experience in any direction.

Recently, Nino presented at ePortfolios & More: The Developing Role of ePortfolios within the Digital Landscape conference hosted by the Association for Authentic, Experiential, and Evidence-based Learning and the Centre for Recording Achievement in Dublin, Ireland. Close to 100 international scholars, teachers, and practitioners interested in ePortfolios and authentic learning attended.

His two presentations — Designing Training and a Community of Practice for a Campus-wide ePortfolio Implementation and Lessons Learned from an ePortfolio Student Showcase: A Case Study — described the University Libraries at Virginia Tech’s unique systematic approach to the ePortfolio program and its integration with other areas, such as digital



Miguel Nino

literacy and experiential learning.

“My goal was to present programs that we are implementing here at Virginia Tech that can be implemented at other higher education institutions around the world,” said Nino.

“It is very rewarding to see students discover themselves and being able to market themselves as competent professionals through ePortfolios,” said Nino. “Through my work in the University Libraries, I will continue to share best practices for using this powerful tool to reach beyond the classroom toward career success.” ■



Tyler Walters

University Libraries Dean Tyler Walters discusses **LEADERSHIP AND CHANGE MANAGEMENT** at Charleston Conference

ACADEMIC LIBRARIES ARE TRANSFORMING to meet the needs of 21st century scholarship. Virginia Tech is a leader in reimagining the role of a research library to fuel innovation and creativity. Through the University Libraries' expert services and technology-rich spaces, Hokies explore and create virtual worlds, print 3D models to test theoretical hypotheses, and transform numerical data into vibrantly visual depictions of world challenges.

Dean Tyler Walters, who holds a Ph.D. in managerial leadership in the information professions, has led the University Libraries through organizational and structural change to provide unique services in areas such as emerging technology, data services, research impact, open access and publishing, and digital libraries.

During his presentation "Academic Libraries: How do we put it all together, become agile, and adapt" at the Charleston Conference in Charleston, S.C., Walters discussed his perspectives on librarianship as well as working with tools such as finances, human resources, organizational culture and values, technology, and university policy to enhance a library's agility.

"Libraries support the full knowledge production process of concept, idea, skills, technologies, and products," said Walters. "The way we do this is changing rapidly. We need to be flexible with our expertise and resources and to orient our mindset on the future and where the organization needs to go rather than the current environment. Our goal is to develop the new perspectives and practices that we need to have

in place to better serve our community. Setting that tone with employees in the organization is imperative for success."

Walters said that external forces, like the changing landscape of learning and research, are the impetus for much needed, but not always easy, change. "Distress comes from external forces that stimulate changes in practices and beliefs. During the change process, leaders facilitate conversations and help maintain respect and civility within the organization," said Walters. "As a leader it's our job to live in a space that is two to four years away. We help our employees see this world with us and understand their role in the process."

When referencing human resources, Walters explained that in addition to traditional librarians, professionals such as computer scientists, data analysts, graphic designers, and research specialists play important roles in today's and tomorrow's libraries.

"It takes a village of professionals. We will have success because we build a village of professionals who think outside of what our norms have traditionally been. Good leaders hire for what they are trying to achieve in the next three years and focus on the goals," said Walters. "It's about how we achieve our future."

His key advice to the presentation audience was to keep a positive attitude. "If you say you can't implement positive change, you won't," said Walters. "Be stubborn and find a way to use the tools at your disposal. Be open to opportunities." ■



DINE WITH THE DEAN

Tyler Walters, dean of University Libraries, has been traveling across the country hosting dinner gatherings to share information about the university's 21st century research library. Alumni, donors, past faculty, staff, and student workers, and anyone with an interest in the University Libraries and its role in the academic enterprise of the university are invited to attend and join in the conversation.

Coming soon to these locations:

- Richmond, VA
- San Francisco, CA

If you are interested in joining Dean Tyler Walters for dinner and cocktails in your area, please contact the dean's office at LibraryDeansOfficeGAE@vt.edu or (540) 231-9257.



Steven Ellingson

ELECTROMAGNETICS OPEN TEXTBOOK

reduces college costs for undergraduate engineering students

THE UNIVERSITY LIBRARIES at Virginia Tech and the Bradley Department of Electrical and Computer Engineering partnered to publish Electromagnetics Vol. 1, the first in a planned series of freely downloadable textbooks on electromagnetics.

The 225-page peer-reviewed textbook, authored by Associate Professor of Electrical and Computer Engineering Steven Ellingson, is currently being used in Ellingson's ECE3105 Electromagnetic Fields course. Students are no longer required to obtain a textbook, which costs \$200 new, thanks to Ellingson's efforts to create and publish this textbook openly.

The project was funded by the University Libraries Open Education Initiative Faculty Grant program.

"My children are recent public college graduates, so I have first-hand knowledge of the unnecessary financial burden that commercial textbooks impose on students and parents," said Ellingson. "It is rewarding to do something that reduces this burden. I also like the idea that anyone anywhere — high school students, interested laymen, and instructors and aspiring students in developing countries — can easily get a copy. So I view this as supporting outreach as well."

Since August, Electromagnetics Vol. 1 has been downloaded close to 7,300 times and viewed by readers in more than 40 countries.

This textbook is an open textbook published under a Creative Commons license, which means that the book is free to modify and share with attribution.

"The book can be modified to serve local requirements, including new, non-traditional, and multi-disciplinary curricula," said Ellingson. "I think students benefit when instructors have unimpeded freedom to do this."

Anita Walz, open education, copyright, and scholarly communication librarian at the University Libraries and her library colleagues are advocates for creating open educational resources, like Electromagnetics Vol. 1.

"My passion is empowering faculty to share their expertise with their students by creating open learning materials and adapting these open learning materials to fit their individual teaching needs at Virginia Tech and beyond," Walz said. "When faculty create open learning materials, they make a valuable contribution to courses and help all students, especially those who may not be able to afford traditional textbooks."

"Working with Anita and VT Publishing in the University Libraries was a genuine pleasure. We worked collaboratively on all phases of the project from early planning through post-release publicity," said Ellingson. "Being able to walk across campus to discuss the project with your editor and the production team makes a big difference."

"Nobody will argue that free-of-charge and free-to-modify are better than the alternatives. What is different now is that the University Libraries is making it possible to have these things in a highly-polished book with the same production expertise and ancillary support that would be provided by a commercial publisher," said Ellingson. "For faculty who have the urge to write a textbook that is not simply 'yet another textbook' on a particular topic, there is no better way to make a unique and welcome contribution than to openly-license and publicly share your work." ■

Students meld creativity and innovation in the University Libraries Fusion Studio



FACULTY MEMBER CORINNE GUIMONT MODELS SAFE CYCLING IN FRONT OF NEWMAN LIBRARY



FUSION STUDIO MANAGER SARA SWEENEY BEAR AND BIKESBURG TEAM MEMBER EROD BAYBAY



In collaboration with the Town of Blacksburg and the Office of Alternative Transportation at Virginia Tech

●● **FOURTH YEAR PHYSICS STUDENT** Erod Baybay is passionate about cycling and wants to make a difference for his fellow Hokies. As a member of Virginia Tech's chapter of Design for America, he saw an opportunity to use his talents to create an initiative that fuses those interests.

Design for America is a national network of students that employ a human-centered design process to create social change. Last year, Baybay and fellow Design for America members Justin Redman, Josh Stutton, and Dalton Philips created Bikesburg, an initiative to promote bicycling as an alternative mode of transportation.

"We thought this could potentially apply to all students on campus and we could make an impact," said Baybay.

The Bikesburg team of undergraduate physics, engineering, and urban studies majors meet weekly in the University Libraries Fusion Studio to research, create, and innovate with the goal of increasing the safety and popularity of bicycling as a way for students to commute to class and across town.

"In the beginning, we conducted research and gathered information about cycling at Virginia Tech and in the Town of Blacksburg," said Baybay. "We cooperated with Blacksburg and the Office of Alternative Transportation on campus to create a 15-year bicycle plan."

As a part of Bikesburg, the group created and distributed informational materials to raise awareness of cycling resources on campus and helped promote the roam NRV bikeshare program.

Throughout the students' work, Sara Sweeney Bear, Fusion Studio Manager, has been their mentor and advocate. "She has helped us refine how we present ourselves and reach out to the community. She has created an atmosphere for us to collaborate better," said Baybay.

"Most of the student groups in this space are working on projects that are not a part of a class," said Bear. "They take something they're interested in and good at and create something new to make a difference. All of the groups are so creative and take different approaches to problem solving."

The Fusion Studio enables students to take risks and build resilience to move forward and not give up. Currently, there are six groups using the Fusion Studio located on the second floor of Newman Library. The projects vary widely, including the development of a portable electric keyboard, the invention of a new sensor to read the core temperature of objects, a tool to help combat panic attacks, and a video program that documents students' travel abroad experiences for inclusion in their ePortfolios.

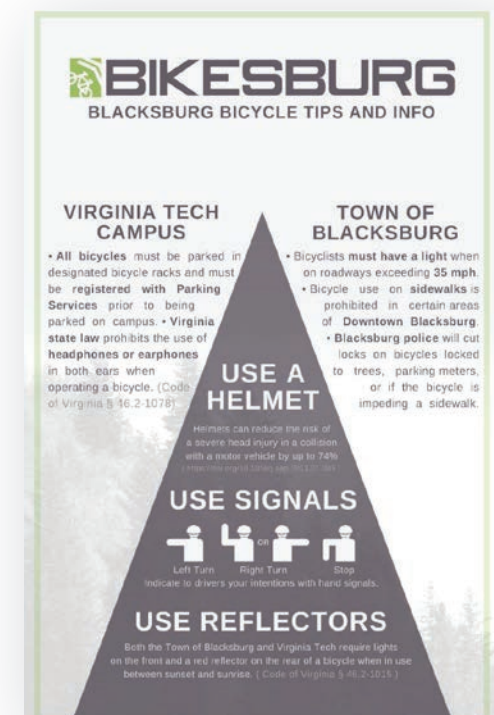
"I know that the groups are helping each other ideate because they help me. They are interested in what I do and give me feedback on the services we provide in the studio," said Bear. "The space itself is a prototype and is always changing. There's not really anything like this."

Bear's research centers on the role of play in adult learning. "So often if you can integrate play into work, you can get a lot more out of both. Play gives permission to take risks. Through this environment and the technology and creative resources that fill this space, students are able to freely brainstorm, create, and innovate."

Student groups apply to work in the Fusion Studio, and if accepted could receive funding from the University Libraries based on their project needs.

Baybay's group, now in its second year in the studio, is also working with the University Libraries 3D Design Studio. Engineering students in the team created a 3D model in CAD for a universal mold for bike reflectors. They will print the mold using 3D Design Studio printers.

"This is an excellent way to create prototypes quickly. We always ideate and prototype before we move to the final product," said Baybay. "We will give these reflectors to students so they are safer on the roads." ■



A HAND OUT DISTRIBUTED TO RAISE AWARENESS OF CYCLING RESOURCES

VT Publishing collaborates with class to publish a book about **The Beatles**



Andrew Pregnall, lead editor of "Welcome to the Beatles," is a senior pursuing a dual degree in microbiology and history.

VIRGINIA TECH HISTORY STUDENTS

recently got published with a little help from their friends at VT Publishing.

A group of 18 students organized, authored, and edited a book, "Welcome to the Beatles," over the course of the spring 2018 semester. The publication is now freely accessible online as an e-Book through VT Publishing and available for purchase as a print book through Amazon.

The students collaborated on the book as part of an advanced class, History Research Seminar, taught by Robert Stephens, an associate professor of history.

"The Book Project gives students the opportunity to put together all they've learned in their major at Virginia Tech and create something both original and of substance," said Stephens. "The future of higher education is giving more ownership to our students. This project allowed the students to write, edit, and publish their own book and put it out into the world for readers to learn from and enjoy.

"It's the quintessential hands-on, minds-on project," Stephens added, "and I applaud the students for the excellent volume they completed."

The students were excited about creating a published book that would live on for years to come.

"I was passionate about this project because it enabled our class to practice so many real-world skills," said Andrew Pregnall, lead editor

of the project and a senior pursuing a dual degree in microbiology and history. "All of these experiences could be useful in someone's future, regardless of career path."

"Welcome to the Beatles" delves into numerous aspects of the iconic rock band and their enduring significance. The book includes sections on media, race relations, gender, business, globalization, and legacy.

Over the years the Beatles have been analyzed exhaustively from nearly every angle. These students bring their own perspective, Stephens said, having come of age generations after the Beatles' heyday, which ultimately enabled them to reexamine the band with the benefit of historical distance.

VT Publishing, the University Libraries-based scholarly publishing hub of Virginia Tech, guided the student authors through the publishing process, helping them to organize and format their chapters, obtain an ISBN and barcode, and ensure that readers can find the book through multiple distribution channels, including Amazon.

"It is exciting to bring the experience of publishing books to Virginia Tech undergraduate students," said Peter Potter '84, director of publishing strategy for the University Libraries. "I was a history major at Virginia Tech back in the day, and I would have loved to have had the opportunity to publish a book at the end of my senior year."

"Being able to work with students and support them in their creativity and authoring was very rewarding," said Robert Browder, digital publishing specialist for the University Libraries.

Immediately after its launch, the book began receiving positive responses, and it was featured on the open-access book website unglue.it. While class members aren't going on their own magical mystery tour yet, they were noticed by a well-known Beatles scholar, Kenneth Womack, who wrote to congratulate them on the book and invite them to a conference.

In a short amount of time, "Welcome to the Beatles" has sold more than 50 copies on Amazon and been downloaded more than 250 times. These downloads have come from VT Publishing, unglue.it, and VTechWorks, the digital archive of the University Libraries.

"The partnership with VT Publishing was not only new and exciting, but a complete success," said Stephens. "It has made the process of creating a book, which the Department of History has been doing for a decade, more streamlined and accessible. Working with Peter Potter and Robert Browder has been fantastic, and I expect we will continue this partnership well into the future.

"In the age of digital production and print on demand, we can and should all be authors," added Stephens. "By asking our students to create for the world beyond the classroom, we allow them to become their best selves." ■

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We, as libraries, have a long-standing commitment to sharing data and research

Nathaniel Porter,
social science
data consultant

Virginia Tech partners with the Qualitative Data Repository to **make data more valuable**

VIRGINIA TECH IS ONE OF THE FIRST institutional partners of the Qualitative Data Repository at Syracuse University, which provides Virginia Tech faculty opportunities to preserve qualitative data in a way that makes their research data more valuable to current and future researchers.

"This is a very exciting time," said Colin Elman, co-director of the Qualitative Data Repository (QDR) at Syracuse University. "We are now on the leading edge of making qualitative data accessible, reusable, and shareable to benefit current and future research."

QDR is a data repository specifically for qualitative data. University Libraries at Virginia Tech's Social Science Data Consultant Nathaniel Porter is Virginia Tech's institutional representative to QDR, and Virginia Tech is one of QDR's first institutional members.

"Qualitative data, the rich text or multimedia data you find in interviews, focus groups, and some surveys, is very important research data. It is analyzed differently than quantitative, or numbers-based, data. There is more judgment involved on the part of the people doing the analysis. Once the article or report is written, the raw data can be inaccessible," said Porter.

Porter said it's important for the University Libraries at Virginia Tech to be on the ground floor of this initiative.

"This is a new frontier; we're moving beyond keeping this data on a laptop or departmental server. We can use QDR to curate, store, and access qualitative and mixed-method data," said Porter. "We can draw on past data and look for patterns that may not have been interesting to the previous researcher, but may help inform new research through seeing patterns that might not have been noted before."

The University Libraries emphasizes making the scholarly work of faculty more accessible to anyone with an internet connection. "We, as libraries, have a long-standing commitment to sharing data and research broadly through open access and to collaborating with other institutions to make the research of the Virginia Tech community have the greatest impact on society as possible," said Porter.

The Library is uploading data from its own qualitative research to learn more about how QDR works.

"We have interviews and surveys from multiple past library resources needs assessments. By combining those, we've been able to gain new insight, improve our services, and change how we have asked questions in new assessments," said Porter. "Researchers at other universities have already requested we share those findings, and depositing at QDR has been an easy and powerful way to make our data widely available."

Through this partnership, the University Libraries at Virginia Tech will have representation on the governance board of QDR and be involved in the latest developments in managing and sharing qualitative data. The University Libraries will host on-campus workshops throughout the academic year in which its data services team and the QDR staff will discuss qualitative data sharing and analytics.

"Virginia Tech is very good at doing this with quantitative data," said Porter. "It is a natural fit to embrace the future for another kind of data that has traditionally been left out of open access." ■



Tunnel Vision:

Immersive technology brings the tunnels of Vauquois, France to Blacksburg

Once a picturesque village in northeastern France with views of lush fields extending several miles to the edge of the Argonne Forest, Vauquois was transformed into a devastated World War I battleground — both above and below the Earth's surface.

From 1914 to 1918, the French and Germans fiercely fought for domination of this strategic hill. When the above-ground engagement made no progress, soldiers from both sides dug tunnels with the goal of destroying their enemy with underground explosives.



The team created a 3D model of the craters at Vauquois from hundreds of aerial photos.



In 2016, the VT Visualization Team traveled to Vauquois to gather data for the project with French partners.

DURING RECEPTIONS on Feb. 13 from 1:30 to 3 p.m. and Feb. 27 from 1:30 to 3 p.m. on the fourth floor of Newman Library, visitors were able to explore these historic tunnels through virtual-reality technology and a physical replica in The Vauquois Experience exhibit.

In April, the exhibit will make its way to the Smithsonian National Museum of American History in Washington, D.C., as part of the 2019 ACCelerate festival to further share the experiences of the soldiers who lived and fought in the Vauquois tunnels.

The Vauquois project began in 2016 with the help of a grant from the Institute for Creative Arts and Technology. Todd Ogle, University Libraries executive director of Applied Research in Immersive Environments and Simulations, and his colleagues on the VT Visualizing History Team traveled to the area of Vauquois to document, scan, and photograph the surface topography and tunnel interiors and unique features.

"All of this is rolled together to create an immersive environment that allows people to learn what it was like to be there at Vauquois before and during the war — going from a peaceful village on a hilltop to a destroyed landscape with a vast array of tunnels underneath," said Ogle.

School of Education Professor David Hicks is also a member of the team.

"The VT Visualizing History Team's goal has been to create an immersive, place-based experience that makes the invisible past visible for people today," said Hicks. "Our work is guided by a single question: If this place could talk, what would it tell us about the nature and impact of World War I on the people, places, and environment on the Western Front in France?"

Scott Fralin, University Libraries exhibits curator and learning environments librarian, created the physical setting for the virtual experience. "My role is to take the virtual world of Vauquois and merge it with the physical world so that the experience is seamless," said Fralin.

While moving through the exhibit's tunnel replica, visitors will see and feel the rough walls with faces carved into them, just as they were felt by the soldiers.

For the two years he has been working on the project, School of Visual Arts Assistant Professor Zach Duer has used his art expertise to make the virtual realm a more immersive and realistic environment.

"This isn't just about showing someone a tunnel from World War I and putting it in a textbook. It's about helping you feel like you're there and understand what the soldiers went through," said Duer. "It's about empathy as much as it is about information and history."

"I've been working on this project for about two-and-a-half years," said Duer. "I bring a visual-arts perspective to how we can work with historians, educators, and geographers to infuse an artistic aspect into an educational simulation."

Dillon Cutaia, a junior majoring in computer science, collaborated with Duer in calibrating the angle of the tunnel using passive haptics.

"When you start the experience, the tunnel is lined up with where you're looking," said Cutaia. "In virtual reality, we make low-fidelity objects from Vauquois scans more vivid. For example, we programmed a complicated lantern with a light on it that you can swing around and light your way. By carrying around this lantern, you feel more there."

This project is an example of what can happen when students and faculty from technical, artistic, and humanities-based disciplines collaborate to create something more than a sum of its parts.

"This project would not have been possible without the efforts of teams of undergraduate and graduate students who are authentically engaged in international transdisciplinary research to showcase a project that stresses pushing the boundaries of virtual-reality technologies," said Thomas Tucker, associate professor in the School of Visual Arts.

Through a University Libraries collaboration with Blacksburg Middle School, middle school students are also experiencing this important battleground through the VT Visualizing History Team's virtual-reality Vauquois program and the middle school's virtual-reality laboratory, which was built by Jonathan Bradley of the University Libraries Virtual Environments Studio.

"Projects like these fit in University Libraries' mission because we are collecting information or data and exploring it in a virtual way," said Ogle. "University Libraries has a robust digital library, and preserving this information in our archive helps future researchers search for corroboration of evidence and examine the information in ways it hasn't been examined before."

"This is an example of what the Virginia Tech's Creativity and Innovation District — which includes University Libraries' Newman Library — is all about." ■



SEE THE VIDEO
bit.ly/vtvauquois



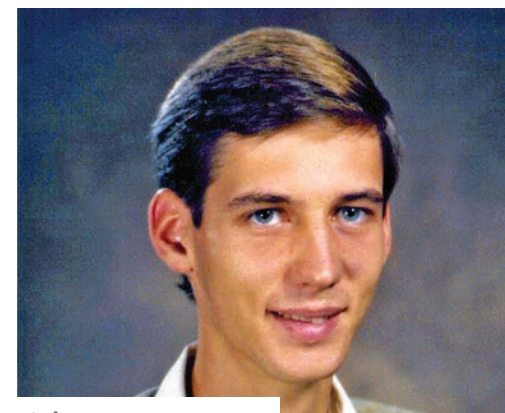
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Your gift today to the Library Excellence Annual Fund will make a difference

BY GIVING TO THE UNIVERSITY LIBRARIES, YOU
SUPPORT EVERY STUDENT AND RESEARCHER
IN THE VIRGINIA TECH COMMUNITY,
INCLUDING THOSE WHO USE OUR RESOURCES
FROM AFAR. THANK YOU FOR YOUR SUPPORT!

givingto.vt.edu/library

Peter Potter



Alumnus



Publisher



Advocate

PETER POTTER, PUBLISHING DIRECTOR for the University Libraries at Virginia Tech and Virginia Tech alumnus ('84) steps into the spotlight to advocate for two of his passions — creating and sharing knowledge with anyone who seeks it and representing his alma mater on the national stage.

Beginning in January 2019, Potter is serving as a national spokesperson and advocate for a joint initiative of Association of Research Libraries (ARL), Association of American Universities (AAU), and Association of University Presses (AUPresses) to advance and expand a new model to finance peer-reviewed open access monographs called Toward an Open Monograph Ecosystem (TOME).

National library leaders tapped Potter, with his 30 years of varied publishing experience, for the TOME Visiting Program Officer position because he understands the need for a new way to provide greater access to scholarly books in the humanities and social sciences.

"The monograph remains the gold standard for scholarship in the humanities and humanistic social sciences," said Potter. "What makes the TOME initiative innovative is that it shifts the business model away from post-publication sales toward front-end publication through direct university grants to faculty members publishing in a network of participating university presses."

Presses that accept these grants agree to make high-quality, platform-agnostic, digital editions freely available to audiences everywhere, including international readers, who may not have access to libraries with comprehensive print collections.

In 2018 Virginia Tech became the first university to publish a TOME monograph — College of Liberal Arts and Human Sciences History Professor Dana Agmon's "A Colonial Affair: Commerce, Conversion, and Scandal in French India."

Potter's professional path exemplifies publishing's transformation — the journey from early computers and the infancy of the Internet to a digital-first environment.

"When I started my first publishing job in 1986 with Wesleyan University Press, it had a single Wang computer. It was the first computer I ever used. The Internet, of course, was still in its infancy," said Potter. "Over the course of my career, I've seen publishing go from a purely analog business — typewriters, linotype printing, and fax machines — to one that is digital-first and where printing is optional."

Potter's three decades of publishing experience includes 17 years at the Penn State University Press, where he co-founded one of the earliest centers for digital scholarly publishing that sought to leverage the complementary strengths of a home press and library. He then spent 10 years at Cornell University Press before moving to Virginia Tech in 2016 where he launched VT Publishing, a digital-first, open-access press that also offers consulting, education, and outreach to members of the Virginia Tech community.

"I've had the good fortune to be a part of the publishing business as it has been transformed by new technologies," said Potter. "During that time, I also saw the old business model of print-based monograph

publishing nearly collapse. In 1986 we typically printed 1,000 to 1,500 copies of a new book. By the time I was stepping away from university press publishing to library publishing in 2016, typical monograph print runs were under 300 copies."

"The fact that printing is now optional means that not everything that can be printed should be printed, and therefore there needs to be a new model for monograph publishing, one that isn't so reliant on print sales," said Potter.

"I know there will be challenges, but I look forward to tackling those challenges. Early in my tenure as Visiting Program Officer, I expect to reach out to TOME's key institutional partners at Association of University Presses and Association of American Universities and to representatives at each of the participating colleges and universities. My goal will be to listen — listen for common needs, common concerns, and emerging pressure points. I will also listen for success stories that we can single out, highlight, and build upon for publicity and future growth."

Potter will reach out to and coordinate with more college and university partners to move the program from pilot to maturity while developing processes to measure how publishing open monographs makes a difference for scholars across the nation and world.

He is excited about how TOME is charting a path forward for sustaining scholarly book publishing. "If it moves the ball forward and points us toward another solution, then TOME will have been a success." ■



Research Impact Librarian Rachel Miles

Tracking engagement: research impact librarian shows how Virginia Tech research makes a difference

UNIVERSITY LIBRARIES AT VIRGINIA TECH WELCOMES RACHEL MILES as its research impact librarian, a rare role that establishes the university as a pioneer in the emerging field of research assessment.

Previously, Miles served as a digital scholarship librarian at Kansas State University. She earned a bachelor of arts in psychology from Wichita State University and a master of library science from Emporia State University.

As an admirer of Virginia Tech's zeal for discovery, Miles firmly believes her new position fits the university's land-grant mission as well as its motto *Ut Prosim* (That I May Serve). "I believe in both the mission and motto of Virginia Tech, and I believe I can assist the community in achieving the highest ideal of both of these through supporting faculty with responsible research evaluation and communication of research impact," said Miles.

Virginia Tech produces a vast amount of research that manifests itself in a variety of different outputs such as journal articles, book chapters, performances, books, software, and data sets.

As research impact librarian, Miles will assist in tracking this scholarship and help faculty understand the impact of their work.

"I provide services to support the Virginia Tech community in discovering, tracking, and communicating the influence and broader engagement of their research, scholarly, and creative works in academic and public spheres," said Miles. "As a researcher, accurately tracking and demonstrating your research impact can help you find collaborators, stakeholders, and areas of engagement that you may not have known about before tracking your impact.

It includes various indicators that show, for example, where research is cited, mentioned in bibliographies, and used in news articles online and in social media," said Miles. "Capturing this information helps tell the story of how Virginia Tech research is making a difference."

With only a few similar positions currently existing in the United States, Miles and the University Libraries are walking a lightly trodden path, leaving prominent footprints to guide other universities and institutions that will follow. ■

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Craig Arthur,
head of foundational
instruction and
community engagement

HIP HOP AT VT EXHIBIT INSPIRES NEW WAYS OF LEARNING

AN EXHIBIT ABOUT HIP HOP EDUCATION in Virginia Tech's Newman Library had people talking.

The colorful and interactive exhibit was an in-depth examination and commemoration of the local hip hop community. It was inspired by "Digging in the Crates," a community-wide initiative that celebrates hip hop studies at Virginia Tech, and "Foundations of Hip Hop," a course co-taught by Anthony Kwame Harrison, the Gloria D. Smith Professor of Africana Studies in the College of Liberal Arts and Human Sciences, and Craig Arthur, head of foundational instruction and community engagement for the University Libraries.

The exhibit documented the history, both academic and extracurricular, of hip hop at Virginia Tech. **Hip hop studies has been an academic field for more than 30 years, and students have been actively promoting the music genre's important role in campus diversity and inclusion for even longer.**

"Hip hop reflects the ingenuity of working class, marginalized, and black and brown youth," said Harrison. "Against all odds, it's established its presence in our most prestigious institutes of higher education, including Harvard, Cornell, Stanford, and Virginia Tech. We need to recognize this and celebrate it."

Many students and faculty have been able to cultivate a strong sense of community through the lens of hip hop, Harrison added. A growing number of faculty and staff who came of age with the music recognize its transformative power in educational spaces.

"The best example of hip hop as a teaching tool is 'Digging in the Crates,' which Craig Arthur played an instrumental role in getting started," said Harrison.

Arthur, who has been a DJ for more than 20 years, said without hip hop and the Virginia

Tech hip hop community, he would not be working in libraries. He credits Harrison's hip hop studies course and a subsequent independent study for helping him find the career he enjoys today.

"In the past few years Virginia Tech has had an upsurge in hip hop-oriented educational activities," said Harrison. "One key factor in this upsurge was Craig's arrival in the library. As a practicing DJ and steadfast hip hop supporter, he had the motivation and organizational chops to mobilize our collective energies."

"I believe strongly that the hip hop arts are digital literacy in action and wield amazing pedagogical power," said Arthur, who earned his bachelor's in public and urban affairs from the Virginia Tech College of Architecture and Urban Studies in 2006. "Hip hop is one of the greatest worldwide cultural forces of the past 50 years."

The number of hip hop scholars and people dedicated to the music genre keeps expanding each year. "Students have always been energized by hip hop, but now we're seeing it among faculty and staff," Harrison said. "So with all this momentum, the timing was right to celebrate hip hop at Virginia Tech through this exhibit."

Scott Fralin, the University Libraries exhibits curator and learning environments librarian, used his creativity to construct the exhibit and illuminate its meaning. The exhibit's walls featured memorabilia from the history of hip hop at Virginia Tech, including posters dating back to the 1980s.

What exactly is the correlation between learning and hip hop? Many current buzzwords in higher education — such as experiential learning, student-directed learning, collaborative engagement, high-impact practices, media literacy, and learning

beyond the classroom — can be effectively actualized through hip hop, Harrison said. Hip hop's fundamental practice of using consumption as a stimulus for creative production, such as sampling old records to create new songs, is exactly what many instructors ask their students to do.

"Once students realize and embrace the parallels between hip hop and their college education, **it can change their whole orientation to learning**," Harrison said. "Suddenly they find themselves gaining traction on topics that once didn't interest them. And knowledge begets more knowledge."

Eric Luu, a Virginia Tech senior majoring in multimedia journalism, became involved with break dancing, or b-boying, when he was 12 years old.

"The dance solidified aspects of myself like being creative, hard-working, dedicated, and wildly passionate," Luu said. "All of these traits have pushed me in ways outside of the dance that make me proud and happy for whom I've become."

Luu added that he wants people to understand how hip hop is influential outside of rap music. "It helps people grow and live, and is one of the reasons why people are who they are," he said. "This culture allows for so many characters to be awakened. Without it, Blacksburg would be less colorful."

Harrison expects hip hop to continue to flourish at Virginia Tech, both in and out of classrooms. "I'm confident the hip hop community here will continue to build on the momentum we have," he said. "This exhibit has been a wonderful showcase, particularly for new students. I've experienced the powerful connections between hip hop and higher education firsthand. It's part of my story, and **it's part of my students' stories.**" ■

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