2022-2023
Annual Report

VT | UNIVERSITY LIBRARIES
VIRGINIA TECH

MESSAGE FROM THE DEAN

During the last year, University Libraries at Virginia Tech has built on its foundation of enhancing teaching, learning, and research through its application of data, information, and knowledge. The Libraries is an integral partner in the university's mission to make a Virginia Tech education accessible and affordable and continue its work toward solving global problems through research and outreach.

The 2022-2023 annual report documents many University Libraries accomplishments. Among these are furthering the production of Virginia Tech faculty-authored open education resources and witnessing the growing, global use of Virginia Tech researchers' scholarship and data through our open repositories. University Libraries' new initiativ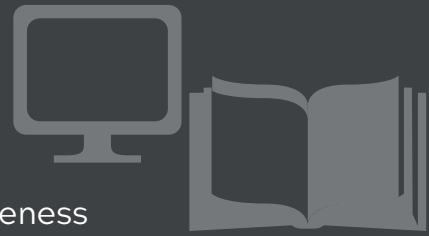es include establishing Virginia's first Patent and Trademark Resource Center and our new long-term technology loan program for faculty and students. We assisted with competitive intelligence for newly forming transdisciplinary Destination Areas as well as provided experiential learning opportunities for library student assistants, helping them to gain employment in their field upon graduation.

We also led the way in creating and adopting a new faculty statement on the responsible use of research metrics, preserving and equitably sharing indigenous knowledge from an Alaskan Inuit community, and producing award-winning research on digital libraries and their environmental impact. You will read about many achievements attained by the talented people in our University Libraries.

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

2022-2023
BY THE NUMBERS

CORE METRICS

Library Resources

Strategic plan initiative: Ensure Institutional Effectiveness
Percentage represents change from FY22

Digital Collections Use
18.51M
252.52%

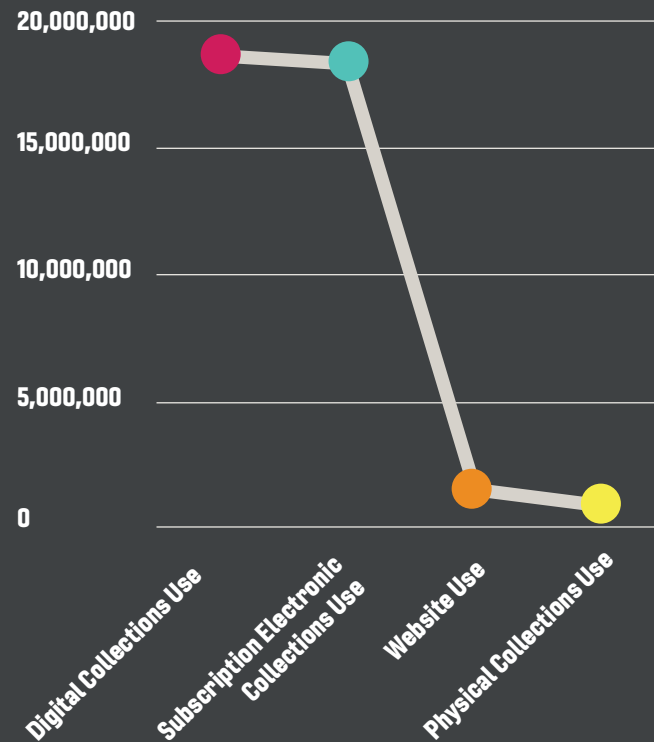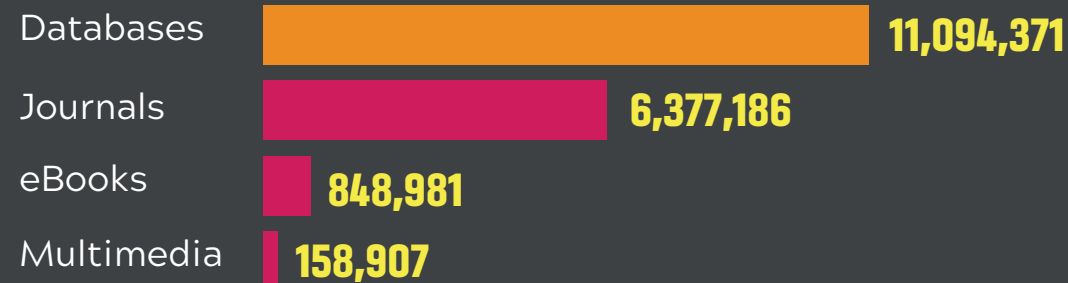**Subscription Electronic Collections Use**
18.48M
45.69%

Website Use
1.51M
-3.31%

Physical Collections Use
18,709
-44.64%

Chart y-axis:
20,000,000
15,000,000
10,000,000
5,000,000
0

Chart x-axis: Digital Collections Use | Subscription Electronic Collections Use | Website Use | Physical Collections Use

SUBSCRIPTION USE

Databases	11,094,371
Journals	6,377,186
eBooks	848,981
Multimedia	158,907

Building Use
1.24M
17.13%

Technology Lending
17,280
43.65%

Consultations
8,239
3.57%

CORE METRICS

Learning outcomes

Strategic plan initiative: Advance Regional, National, Global Impact
Percentage represents change from FY22

Instruction Events
1,566
-1.69%

Experiential Learning
163

Instruction Event Participants
20,474
32.46%

Instruction that supports university curricula

1,147
13.12%
events

8,473
8.75%
event participants

Instruction that supports general development

419
-27.63%
events

12,001
23.19%
event participants

CORE METRICS

Intellectual Output

Strategic plan initiative: Advance Regional, National, and Global Impact

Percentage represents change from FY22
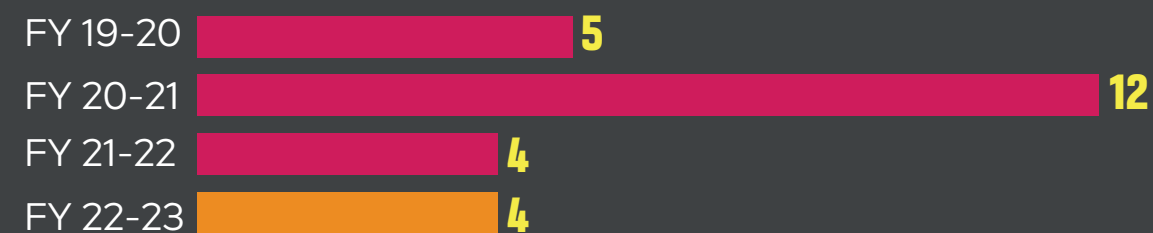
GRANT AWARD AMOUNT
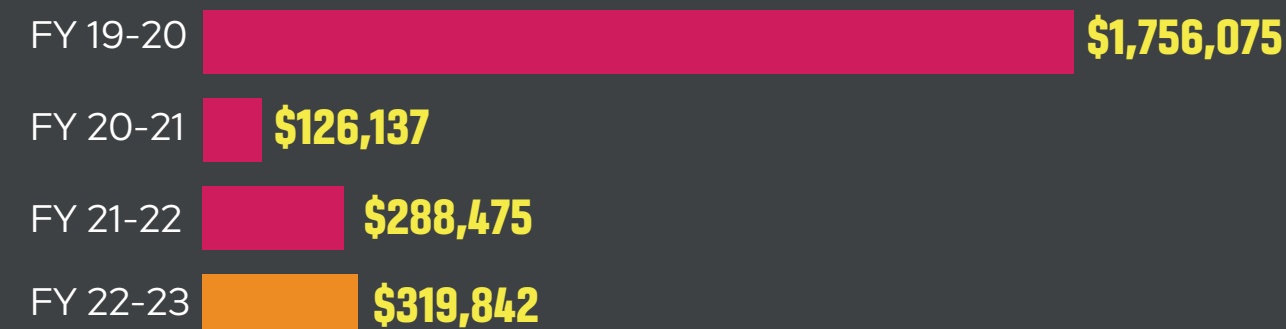
$649,264

-5.57%

GRANTS AWARDED

11

-8.33%

NEW GRANTS AWARDED

FY 19-20	5
FY 20-21	12
FY 21-22	4
FY 22-23	4

AMOUNT OF GRANT DOLLARS AWARDED

FY 19-20	$1,756,075
FY 20-21	$126,137
FY 21-22	$288,475
FY 22-23	$319,842

CORE METRICS
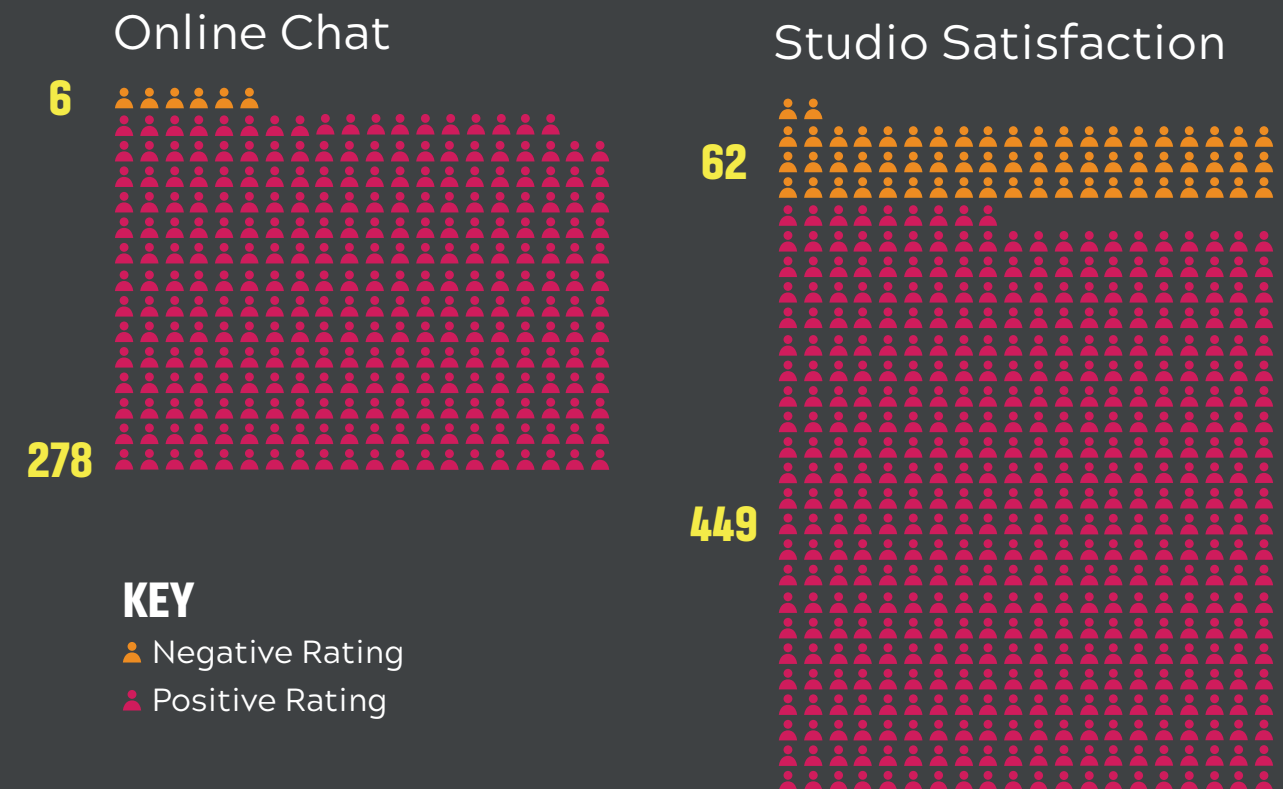
Climate Outcomes

Strategic plan initiative: Elevate the Ut Prosim (That I May Serve) Difference

Percentage represents change from FY22

PATRON SATISFACTION

91.45%

INSIGHT: While patron satisfaction did drop, the number of responses overall did increase. Notably, when asking for detail, the negative answers focused around equipment issues. There were only six people who indicated that the staff was unhelpful.

RATINGS FOR FY 2023

Online Chat

6

278

Studio Satisfaction

62

449

KEY

Negative Rating

Positive Rating

GOAL

ADVANCE REGIONAL, NATIONAL, AND GLOBAL IMPACT

University Libraries, through its activities involving creativity and innovation, data, and scholarship will actively contribute to the university's learning, discovery, and engagement missions and advance its regional, national, and global impact.

University Libraries **elevates the productivity and impact of faculty scholarship** through openly sharing research data and scholarly articles and promoting faculty authored books and expertise. This work **enhances the university's global reach and reputation**.

Open Education Initiative increased the number of faculty-authored open educational resources

12 OER	6 colleges	50% increase over FY 22

8%
increase in faculty adoption of OER
=
$490,400
in student textbook savings

The Open Education Initiative in the University Libraries offers services to encourage and support the Virginia Tech community in the creation and adoption of open educational resources (OER). The Open Education Initiative team helps faculty with the full publication process from visioning to publishing OER, including textbooks and other educational materials that are freely available to anyone with an internet connection.
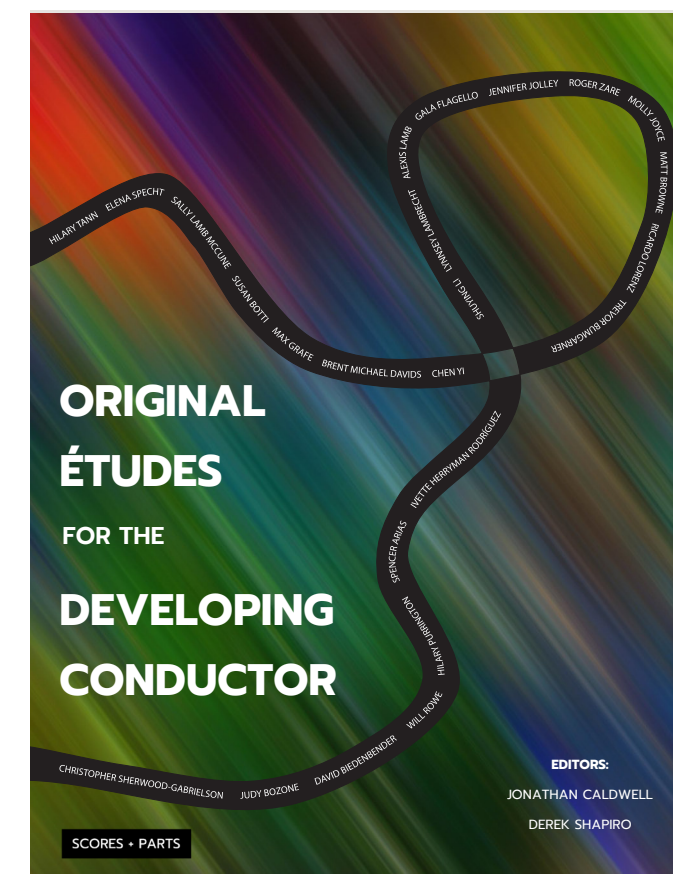
During the last year, the University Libraries collaborated with faculty on 12 open educational resources with partners in six colleges. This number reflects a 50 percent increase from the previous year.
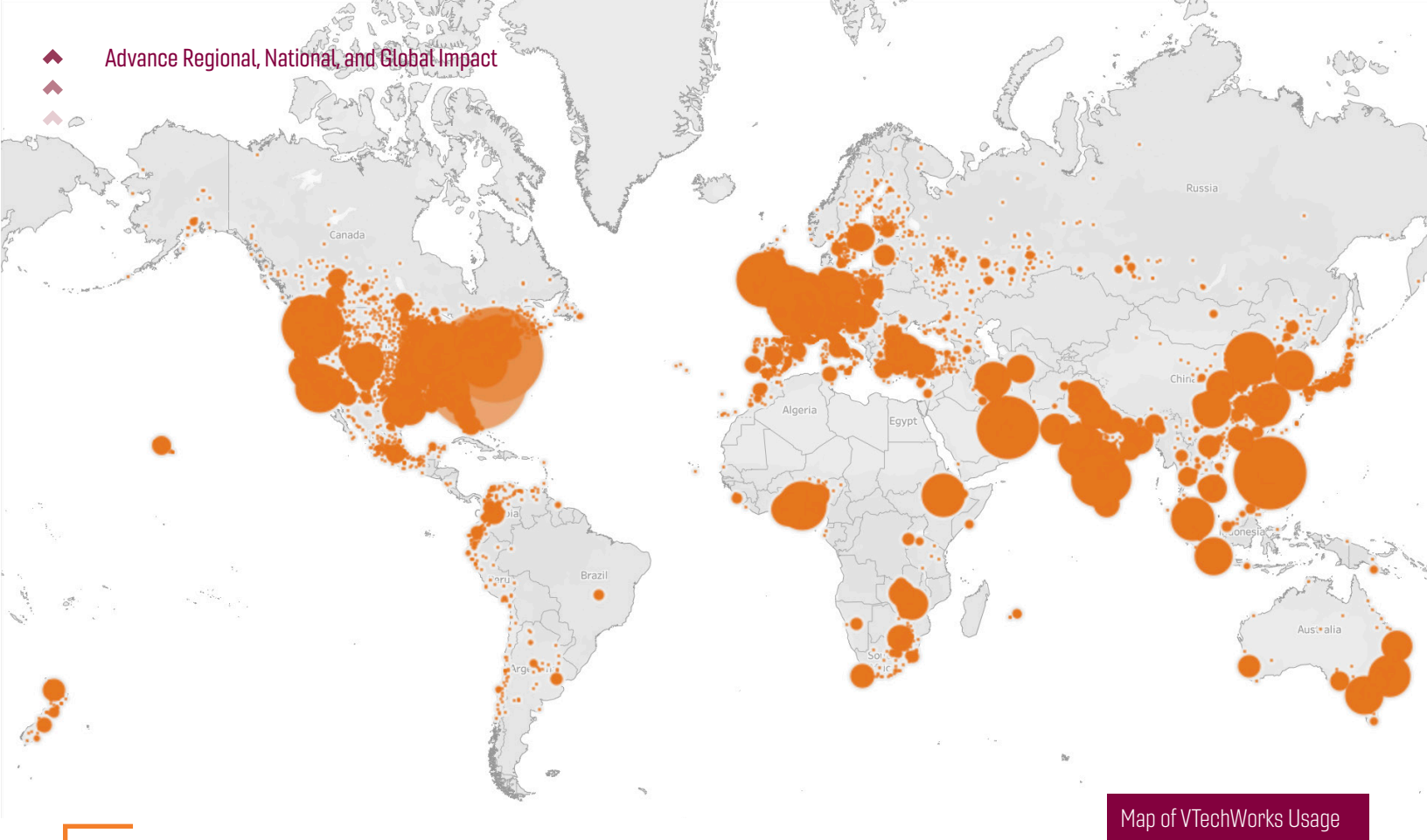
A notable open textbook published in December of 2022, "Introduction to Earth Science" by Laura Neser in the Department of Geosciences, has been downloaded more than 100,000 times since its publication by users in more than 100 countries across the world. This more than 500-page open textbook provides a comprehensive introduction to Earth Science that is freely available online through the institutional repository VTechWorks. It is intended for a typical 1000-level university introductory course in geosciences.

A recently published open textbook, "Original Études for the Developing Conductor" by Jonathan Caldwell of University of North Carolina at Greensboro and Derek Shapiro, Virginia Tech assistant professor of music, features études commissioned from and composed by 25 living composers. The majority of those featured are women- identifying composers or composers of color. Featured works include Chen Yi's "Ban," a piece that pulls its pitch material from folk music in northern China; a tumbao by Ivette Herryman Rodríguez, drawing from the Cuban genres of son and salsa; and Susan Botti's "Vespers (Walking in Beauty)," inspired by movement in nature. The textbook is being used in conducting classes in fall 2023. Since its publication in April 2023, it has been downloaded more than 5,000 times by users in more than 40 countries.

In addition to the creation of open educational resources, the Open Education Initiative team encourages faculty to adopt existing OER for their courses. The team consults with faculty to help them find alternatives to expensive textbooks and other open resources for their courses. This year, adoption of OER for courses increased 8 percent resulting in $490,400 in savings for students.

ORIGINAL ÉTUDES FOR THE DEVELOPING CONDUCTOR

EDITORS: JONATHAN CALDWELL DEREK SHAPIRO

SCORES • PARTS

Map of VTechWorks Usage

Alan Munshower (at left) and Alex Kinnaman of University Libraries. Photo by Chase Parker for Virginia Tech.

Usage of Virginia Tech's institutional repositories expands

University Libraries houses both the scholarly repository VTechWorks and the institutional data repository. Both repositories are seeing an increase in downloads, views, and Virginia Tech faculty who upload their work to share openly with the world.

Users from 122 countries visited or downloaded data from the Virginia Tech institutional data repository during FY23. The repository logged more than 55,000 downloads and 90,000 views, with the most activity coming from the United States, United Kingdom, and Germany. Virginia Tech faculty are taking advantage of University Libraries data services team to curate and upload 62 new datasets to the repository.

"These numbers meet my expectations," said Jon Petters, associate director for data management and curation services. "For dataset publications, it's a big increase from where we were two years ago (at 37 data set uploads) when we migrated to our new repository platform. Now that we have data publication workflows that are positioned to scale up, I anticipate conducting further outreach this year toward increasing these dataset publication numbers in the future."

"Once we have a longer track record of existence we can expect to see our published datasets show up in reference lists for peer-reviewed research publications," said Petters. "That'll be interesting to track when the time comes!"

VTechWorks, Virginia Tech's scholarly repository created in 2010, logged close to 17 million file downloads — a 196% usage increase from the previous year. The VTechWorks team also received a 230% increase in requests for embargoed electronic theses and dissertations (ETD) over the last year.

"We get these daily from users all over the world and pass them on to the authors who can then decide to make the item public, share the file with the requestor, or deny the request," said Philip Young, University Libraries' institutional repository manager. "ETDs are usually embargoed because the authors are publishing papers or a book derived from the work."

University Libraries' carbon footprint research leads to international best paper prize

Alex Kinnaman and Alan Munshower of University Libraries were awarded The Best Paper Prize at iPRES 2022, the 18th International Conference on Digital Preservation in Glasgow, Scotland. The jury members selected Kinnaman and Munshower's paper, "Green Goes with Anything: Decreasing Environmental Impact of Digital Libraries at Virginia Tech," in part because the "topic of this paper couldn't have been more timely."

Kinnaman and Munshower examined the carbon footprint of University Libraries' practices, particularly appraisal and preservation, and made a set of recommended adjustments and areas for further consideration. The team investigated two specific areas, fixity and storage, and the energy consumption of both based on the University Libraries' current digital infrastructure.

"Storage, for example, is fluid," said Kinnaman, University Libraries' digital preservation coordinator. "Content moves back and forth between various servers on different mediums, and pinpointing an accurate read of any given storage space at a given time requires estimations and a grain of salt."

They focused on how they could reorient library practices to consider the climate impact more urgently.

The jury said Kinnaman and Munshower concluded their research with strong recommendations for Virginia Tech and for the wider library community that can foster a more "environmentally sustainable digital platform."

Libraries are designed to preserve analog and digital material and all things digital require significant energy. "As a digital preservationist, my job is essentially to ensure that all of our digital assets are accessible for a minimum of five to 10 years," said Kinnaman. "This requires a massive amount of storage and ongoing maintenance activities, which effectively does what is necessary to meet that goal, but there is never a stopping point because preservation is active."

The team did not set out to tear down existing best practices, ISO standards, or workflows of digital preservation. "Though, when many of the standards are optimized for an endless supply of resources, there will be a breaking point where that model is no longer sustainable," said Munshower. "A goal of less energy consumption may mean making difficult decisions around preservation practices."

Ren Harman conducts an oral history interview.

Center for Oral History captures and preserves stories of lived experiences

The recently created Center for Oral History brings together scholars and community members to create and preserve oral stories and provide an introduction to the field of study of oral history.

For several years, a group of Virginia Tech faculty from disciplines across campus discussed the challenges in creating, managing, and accessing oral history collections. The group decided that a Center for Oral History would raise awareness for the use of oral history, formalize practices and training to create oral histories and educate the public about the importance of oral history for both research and outreach purposes. The center is not a repository for oral history content, rather it was created to align existing resources and expertise on campus, support new oral history projects, identify existing oral history collections in archives, and educate the public by making more oral history content accessible for study or enjoyment.

As a college-level center, the Center for Oral History brings together practitioners, researchers, archivists, technical experts, Institutional Review Board representatives, and community advisors into a standalone group focused on the process and practice of oral history. The center is based in the University Libraries with partners in the College of Liberal Arts and Human Sciences and the Virginia Tech Carilion School of Medicine.

"Through training programs, equipment loans, individual or classroom consultations, and resource lists, we hope to make the practice and study or oral history a much more common part of the Virginia Tech experience," said Aaron D. Purcell, chair of the Center for Oral History and director of University Libraries' Special Collections and University Archives.

"We are truly an interdisciplinary group with years of experience in oral history," said Ren Harman, member of the center's stakeholders committee and University Libraries' oral history projects archivist. "There are so many pieces that make up an oral history project, so it is nice to have every piece of the puzzle represented within this group."

The Center for Oral History is reaching out to communities in the New River Valley and beyond to promote oral history collections and to train people who are interested in doing their own oral history interviews.

Making connections to enhance collections navigation to reveal novel relationships

University Libraries is testing the benefit of linked data in offering better navigation of collections and revealing relationships between that data for deeper understanding.

In late 2020, University Libraries created a Linked Data Interest Group open to all library employees that met virtually once a month to identify opportunities to experiment with linked data and find areas where library collections could benefit from linked data, identify, obstacles, and develop next steps.

From this group's work, the library acquired a Wikibase cloud account that offers an opportunity to practice and refine skills and model current library collections and projects in a linked data environment. Current projects include identifying collections where a linked data model could enhance collections navigation or reveal novel relationships within the data. The group is also looking into seeding Wikidata with references back to University Libraries' digital collections to increase search engine optimization and visibility for researchers and the public.

GOAL

ELEVATE THE UT PROSIM (THAT I MAY SERVE) DIFFERENCE

University Libraries commits to build and maintain enduring climates of mutual care, respect, and responsibility. We affirm the intrinsic humanity of every person and claim an active role in removing all barriers to inclusive and equitable participation in our work.

University Libraries **engages in partnerships** to provide service to students, faculty, and local communities and **encourages an environment in which all individuals can thrive**.

Making connections to build partnerships with historically Black colleges and universities

The university's Office of Inclusion and Diversity (OID) requested University Libraries' research impact and intelligence team to conduct research on overlap of research strengths between Virginia Tech and historically Black colleges and universities (HBCU) to help make connections for future collaborative projects.

As a result of this assistance, University Libraries' research impact and intelligence team created a dashboard highlighting research strengths and researchers at select HBCUs. This dashboard will help Virginia Tech researchers and scholars connect with HBCU scholars to build partnerships between the institutions. The dashboard is in a pilot phase with select, high-level data. Plans include continuing the project with the university's technology-enhanced learning and online strategies office and other campus partners to develop a more detailed database including past research collaborations between Virginia Tech and HBCUs.

Over the last few months, University Libraries' research impact and intelligence team and OID have met with all transdisciplinary teams involved in the university's Destination Area 2.0 initiative. The group discussed types of recommended collaborations with HBCUs, the deep collaborative infrastructure OID's office has already developed to facilitate HBCU collaborations, and potentially synergistic research strengths between given institutions.
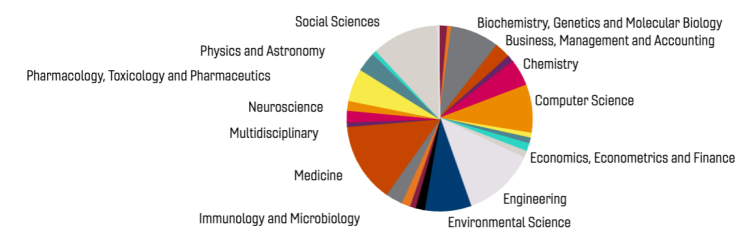
Institution1
Texas Southern University

HBCUs Institution Overview
Data Source: SciVal, 2017-2022+
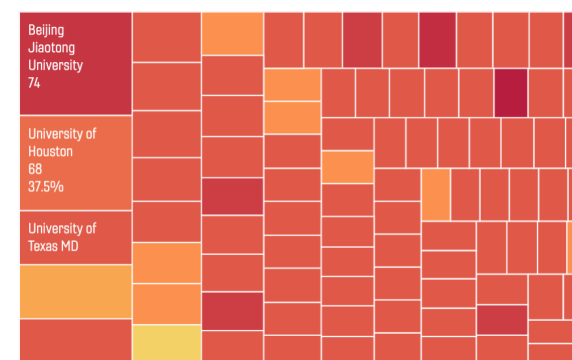(select HBCUs of interest by number of publications)

Research Fields

Social Sciences
Physics and Astronomy
Pharmacology, Toxicology and Pharmaceutics
Neuroscience
Multidisciplinary
Medicine
Immunology and Microbiology
Biochemistry, Genetics and Molecular Biology
Business, Management and Accounting
Chemistry
Computer Science
Economics, Econometrics and Finance
Engineering
Environmental Science

Top Authors
Sahin, Ismet
Yu, Lei

Collaborations

Beijing Jiaotong University 74
University of Houston 68 37.5%
University of Texas MD

Institutions that have collaborated with the selected HBCU with user selected number of co-authored publications, listing percent growth of publications since 2017.

Co-authored publications
10   1,199

Co-authored publications (growth %)
-100.0   200.0

Contact & Data Information

Eric Glenn becomes first Director of Belonging, Engagement, and Organizational Development

In November, Eric Glenn began the inaugural role of University Libraries' Director of Belonging, Engagement, and Organizational Development. Glenn came to the University Libraries from the Virginia Tech Transportation Institute where he served as its diversity, equity, and inclusion subject matter expert. He holds a bachelor of science degree from King University in neuroscience, a graduate certificate in diversity and inclusion from Virginia Tech, a certificate in diversity and inclusion from Cornell University, and is currently pursuing a master of science in higher education and student affairs degree.

"Stepping into this role, I was acutely aware of the exceptional opportunity before me. As I reflected on the pivotal role of the University Libraries as a vital information and service hub for students, staff, faculty, and the local community, I understood the distinctive influence the library holds. It becomes a sanctuary where students can forge connections, effectively transforming a sprawling institution like Virginia Tech into a tightly-knit home that echoes the familiarity of a hometown library," said Glenn. "University Libraries Dean Tyler Walters' passion for the creation of this role assured me that I would have support to implement pivotal changes that would attract diverse talent, bolster retention rates, and continue to cultivate a work community built on trust and respect."

Eric Glenn, Director of Belonging, Engagement, and Organizational Development

Glenn's main goals for his work in the library include:

- Cultivate Trust Within the Work Community: Foster an environment of trust, open communication, and collaboration among all staff members, building a foundation for a harmonious and productive work culture.

- **Establish Empathic Leadership:** Develop leaders who lead with empathy, understanding, and inclusivity, creating a supportive environment that values each individual's contributions and needs.

- **Enhance Employee Engagement:** Boost employee engagement by creating opportunities for involvement, growth, and recognition, resulting in a motivated and dedicated workforce.

- **Amplify Community Engagement:** Strengthen engagement with local rural communities and Black, Indigenous, and People of Color (BIPOC) communities, enhancing the library's role as a valuable resource and hub for these groups.

- **Increase Staff BIPOC Representation:** Promote diversity by actively working to increase the representation of BIPOC staff within the libraries.

- **Improve Retention Rates:** Enhance efforts to retain valued staff members by ensuring their satisfaction, growth, and sense of belonging within the library organization.

- **Forge Relationships with MIS Libraries:** Establish meaningful connections with libraries from Minority Serving Institutions (MIS), facilitating collaboration, knowledge sharing, and mutual support.

- **Develop Networking Groups:** Create targeted networking groups within the library to encourage connections, collaboration, and mentorship among staff, fostering a sense of community and shared purpose.

- **Enhance DEIBA Knowledge:** Continuously increase your own knowledge and expertise in Diversity, Equity, Inclusion, Belonging, and Accessibility (DEIBA) best practices, contributing to a more inclusive environment.

- **Fulfill Organizational Goals:** Align all efforts to support the overall organizational goals, aiming to generate revenue, save costs, and contribute to the achievement of the institution's broader objectives.

"All individuals can explore their interests, expand their knowledge, and thrive in University Libraries spaces, and programs," said Glenn. "I look forward to working with library employees, regional community partners, and the Virginia Tech campus community to continue to cultivate an environment centered on belonging, inclusion, empathy, and engagement."

Group in Alaska walking on the ice over the Kotzebue Sound. Photo by Andi Ogier.

Rematriation Project: Restoring and Sharing Inuit Knowledges

Indigenous knowledge is critical to solving challenges through scientific research. In the past, Indigenous communities have been treated unfairly. In November 2022, Corina Qaaġraq Kramer, an Inuit community leader living and working in a frontline community in rural northwest Alaska, and Cana Uluak Itchuaqiyaq, an Inuit assistant professor of professional and technical writing at Virginia Tech, led a 90-minute, interactive workshop that discussed their Rematriation Project: Restoring and Sharing Inuit Knowledges.

This project, a collaboration of Aqqaluk Trust, Virginia Tech's English department in the College of Liberal Arts and Human Sciences, and University Libraries at Virginia Tech, aims to create capacity for and access to digital archiving and data related to Inuit cultural, tribal, and scientific knowledge and history by strategically incorporating the community into a research design based on humility, cooperation, and responsibility to tribe.

Kramer said the importance of the topic is two-fold.

"First, we need to be giving the Indigenous communities an equal chance to weigh in on what research is done on our Indigenous land according to our community needs, and also how it is done with respect to our values and knowledge systems," said Kramer. "Secondly, as the communities experience a more equitable approach to research partnerships and they are truly given the ability to co-lead various projects, trust can be rebuilt. With more trust, there will be more open engagement in research projects, which will lead to far better outcomes."

Itchuaqiyaq comes from an Inuit community in northwest Alaska and has experienced research as both the researcher and the subject. "Indigenous communities are the stewards and experts on their homelands and their communities," she said. "Their wisdom should be incorporated, not just for equity's sake, but as a strategy toward better research outcomes."

Itchuaqiyaq said innovation in research comes from actively incorporating community partners in research design from its conception.

"This topic needs to be discussed because while there are a lot of reasons and even guides about incorporating equity into Arctic research, there is little information about what that looks like and how these partnerships play out in the nuts and bolts of projects," said Itchuaqiyaq. "Corina and I are sisters and collaborators, and so that relationship affords frank conversations about the work and the process as well as common goals that we share and can advocate together for in our projects."

This issue is personal for Itchuaqiyaq. Polar research is an important interdisciplinary area of study with generous funding support from federal agencies. However, she said the communities need to be at the center for better research outcomes.

"My mama literally lives 30 feet from the ocean and the sea has been chipping away at that distance for years, but that's not even our biggest concern," she said. "Our community has a lot of experience and expertise, but it also has a lot of needs, dire needs. Our youth and our Elders are dying and our way of life is being changed dramatically. Research, if it is done in a good way that addresses community-determined and driven goals and needs and builds local capacities, can help. I'm invested in helping Virginia Tech be a part of the solution."

GOAL

DESTINATION FOR TALENT

University Libraries is a place to collaborate, innovate, create, and share. We aspire to transform the way people experience knowledge and through our efforts, help to attract bold and dynamic faculty, staff, and students to a diverse and inclusive community to be a force for positive change.

The University Libraries **highly values and encourages transdisciplinary discovery and evidence based, student-centered learning** through its many resources and spaces. The library studios bring together students and faculty from all disciplines to experience knowledge, discovery, and learning through emerging technologies and library employees' unique expertise.

Newman Library, Blacksburg.
Photo by: Chase Parker for Virginia Tech.

Unique residency program gives robust opportunities to early-career library professionals

With an increase in vacancies in recent years, Dean Tyler Walters saw an opportunity to try a new way of recruiting. The University Libraries Residency Program, fashioned after the Association of College and Research Libraries' Diversity Alliance for Academic Librarianship residency program, of which Virginia Tech was a co-founder, offered six entry-level resident librarian positions, hired as a cohort.

"The Diversity Alliance program departed from other residency programs in one way by being a 3-year program, not one or two years," said Walters. "Typically, residents in a 2-year program are looking for a job after completing their first year, because these programs typically do not offer employment by the library hosting the residency. This is one of the significant points of departure from the program. We hire the residents on a 3-year contract, but they will be offered ongoing, full-time positions during their third year."

University Libraries is able to use vacant position allocations funded in the university's state-supported, core budget. These positions are ongoing and give the residents an opportunity to transition into a library faculty member position.

The resident positions are designed for recent graduates of a master's degree program or entry-level library, data, or information professionals and are part of an intensive program where residents work in one of six strategic

areas: data services, evidence synthesis, collections, metadata services, open education, or publishing services. The individualized program reflects the new hires' professional interests and long-term career goals.

As with all innovative programs, the first time doing it can be challenging. The process included searching for, interviewing, and selecting six residents for six different positions with only one search and one search committee.

"We had never done this before, which is why I chose to chair it myself," said Walters. "I knew that we would bump into issues that we wouldn't know how to handle in the search, hence these issues would come to me as dean anyway.

"Chairing the search meant I would be directly involved, which could expedite our decisions and keep us moving forward," said Walters. "Of course, we had truly excellent people serving on the search committee who supported this hiring approach. Without their intelligence, experience, and dedication, none of our hiring results would have been possible."

This program does more than meet the hiring needs of the library, it attracts early-career librarians and supports their careers in academic and research libraries. Each resident has a mentor from University Libraries that helps them evolve as a professional.

"It's about attracting and selecting resident librarians from underrepresented communities and supporting their acclimation to university libraries so they join our field and find satisfaction in it," said Walters. "Helping them is the primary goal. The library benefits by retaining well-oriented and trained librarians from diverse communities, which enrich our library community and help us to evolve our own perspectives."

Student employees gain valuable experience while making a difference

A student position in the University Libraries is an opportunity to gain valuable experience and hard and soft skills while serving the Virginia Tech community. Each year, the library hires close to 150 students who assist in areas such as studios, collections, technical services, virtual and augmented reality research, marketing and communications, and data services.

Jared Harris, Prototyping Studio

Jared Harris, a business information technology major has been working in the Prototyping Studio since October 2021.

"Working in the Prototyping Studio has given me the opportunity to learn more about just being creative and trying different things," said Harris. "A lot of the things that we come up with, were actually just because we spontaneously try something out. I like that this job has allowed me the opportunity to be very free and hands-on with what I'm able to do.

"The biggest benefit of working here is that you interact with a lot of different people from a lot of different backgrounds," said Harris. "A lot of people that come in here are not just students, some of them are faculty. Some of them are people that live in the area. So you get to experience and interact with a lot of different people."

Harris works with creative patrons on a wide range of projects. It reminds him of when he was younger and learning in a more hands-on environment. This job taps his creativity in a way he enjoys. "Coming here and coming back to this space has definitely brought more of my creative side back to me, which I'm really happy about."

Sonia Chaudhary '23, former student employee, Applied Research in Immersive Experiences and Simulation

May 2023 computer science graduate Sonia Chaudhary joined Applied Research in Immersive Experiences and Simulations (ARIES) in University Libraries in the fall of 2021. During her time with ARIES she built virtual reality environments that incorporated motion capture.

"After graduation, I'm moving to New York. I'm going to be working with Amazon in cloud computing because of my computer science degree. I have a little experience in cloud computing. And I thought to pursue that further and see how I could potentially grow in that field. And within Amazon, there's also an augmented reality and virtual reality side of things. So hopefully I can get into that field later on," said Chaudhary. "If all this didn't exist here, I don't think I would have ever tried it out on my own because it just would've been super expensive, or very, very hard to do on my own. These resources helped me understand that just by asking for a little bit of help, if you can reach out to the right people, you can do anything that you set your mind to."

Aiden Hing, 3D Scanning Studio

Aidan Hing, a building construction junior, helps Hokies' digital dreams come true through his job in Newman Library's 3D Scanning studio. Hing is a University Libraries student scanning assistant and said this has been his favorite job thus far in his college career. "It's a productive desk job that lets me constantly interact with people and the community, which I love!"

Hing said his job is unique because 3D scanning is a specialized skill that focuses on bringing people's real-life objects into the digital world.

"This helps the Virginia Tech community daily as we help professors create digital resources for their students, as well as helping Hokies and folks in the community complete their personal projects," said Hing. "It's a very rewarding experience knowing I'm helping so many people with their dreams."

Upon graduation, Hing, a member of the Virginia Tech Corps of Cadets and recipient of a Corps' Emerging Leader Scholarship, plans to become an officer in the U.S. Army. The contract has been signed and his goal is to work in the Army Corps of Engineers.

"The 3D scanning skills and software I use in the studio are very transferable to many jobs in the future as 3D modeling like CAD becomes evermore present," said Hing. "This applies both to the construction field I'm studying now and the Army as they modernize their technology."

Millie Yopp, Technical Services

Most students at Virginia Tech pass by the bulletin boards on campus without a second glance. But for Millie Yopp, one of the flyers in Shanks Hall advertising Virginia Tech's creative writing program caught her eye and inspired her to change course.

From a young age, she was enraptured by Erin Hunter's "Warrior" series. This middle-grade level fiction is the kind of novel Yopp hopes to write one day. She loves whimsical literature and views it as an escape.

Her creative writing is a mixture between being inspired by her own life and turning those inspirations into fantastic adventures. Influenced by the "Knights of the Round Table," another literary favorite of hers, Yopp likes to incorporate fantasy into her writing to create a story that appeals to her wanderlust.
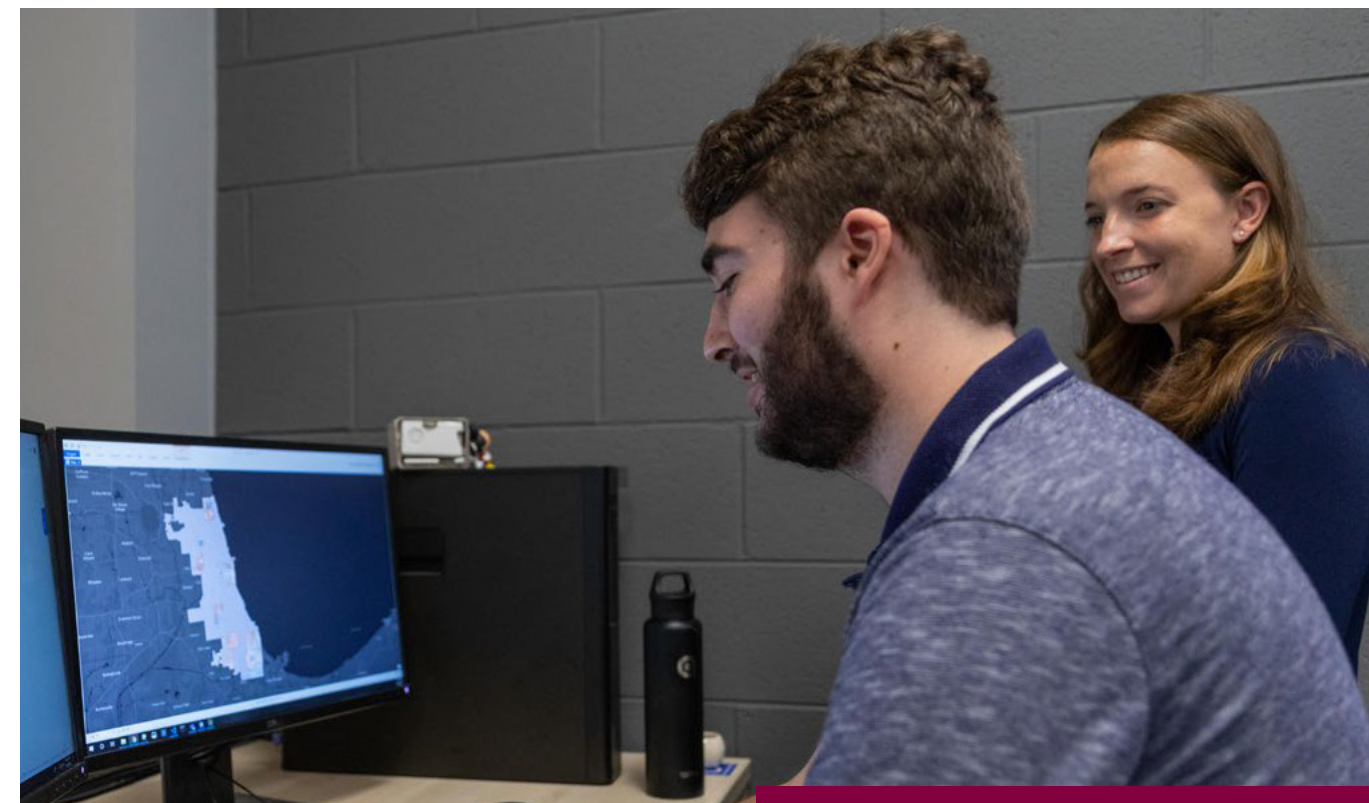
She currently works in Newman Library with University Libraries' Technical Services, where her duties range from fixing book bindings to digitizing publications. She is considering continuing work in a library upon graduation and is entertaining the idea of pursuing a master's degree in library science. And, of course, she wants to write at least one middle-grade novel.

GOAL

ENSURE INSTITUTIONAL EXCELLENCE

University Libraries will continue to be a collaborative partner in the university's academic enterprise by optimizing the efficiency and effectiveness of existing library programs and promoting collaborations beyond internal and external boundaries.

University Libraries is a key university-wide partner in research impact and intelligence to help advance university programs that are a**mong the best in the world and help them achieve international reputational excellence**.

Library data experts Jonathan Briganti and Anne Brown.

Evidence synthesis services team and DataBridge provide competitive intelligence to strengthen work in the university's Destination Area

The evidence synthesis services (ESS) and research impact and intelligence teams are collaborating with the library's DataBridge program, an undergraduate research experience that gives students interested in working with data a chance to increase knowledge and hone skills, to assist Virginia Tech research faculty in transdisciplinary discovery, learning, and outreach efforts.

The library teams helped researchers more clearly define their project's scope and transparently reported their search strategies. They highlighted literature that appeared specifically relevant and used that literature to inform the next steps in the research.

The library teams also scoured the internet for relevant competitors, potential collaborators, and complementary or competitive initiatives for the research teams. After identifying these initiatives, they emphasized important characteristics of these projects such as funding sources. Once the team gathered the data, they organized it into a searchable database and presented the most relevant organizations, individuals, or initiatives in a polished slide deck to the researchers.

The library teams' work helped researchers to clearly articulate their unique contributions in the context of research that has already been done or is currently in progress. This work also demonstrated awareness of potential competitors that will help researchers identify and pursue collaborators who are doing similar work.

University Libraries is home to Virginia's only Patent and Trademark Resource Center

Sarah Over, University Libraries' engineering collections and research analyst, led the application process for Virginia Tech's designation as a Patent and Trademark Resource Center.

University Libraries at Virginia Tech recently became Virginia's only Patent and Trademark Resource Center designated by the United States Patent and Trademark Office to support the public with trademark and patent assistance. Services and resources can be accessed through University Libraries' branch locations in Blacksburg, Roanoke, and the greater Washington, D.C., metro area.

Sarah Over, University Libraries' assistant professor and engineering collections and research analyst, led the application process for Virginia Tech's designation as a Patent and Trademark Resources Center.

"This makes sense for an engineering librarian to do," said Over. "No one in our state provides this service for the general public. It's filling a gap. People across our region can drive to our libraries and access databases they can't access off-site. We are also here to provide in-person or virtual help on how to use those resources.
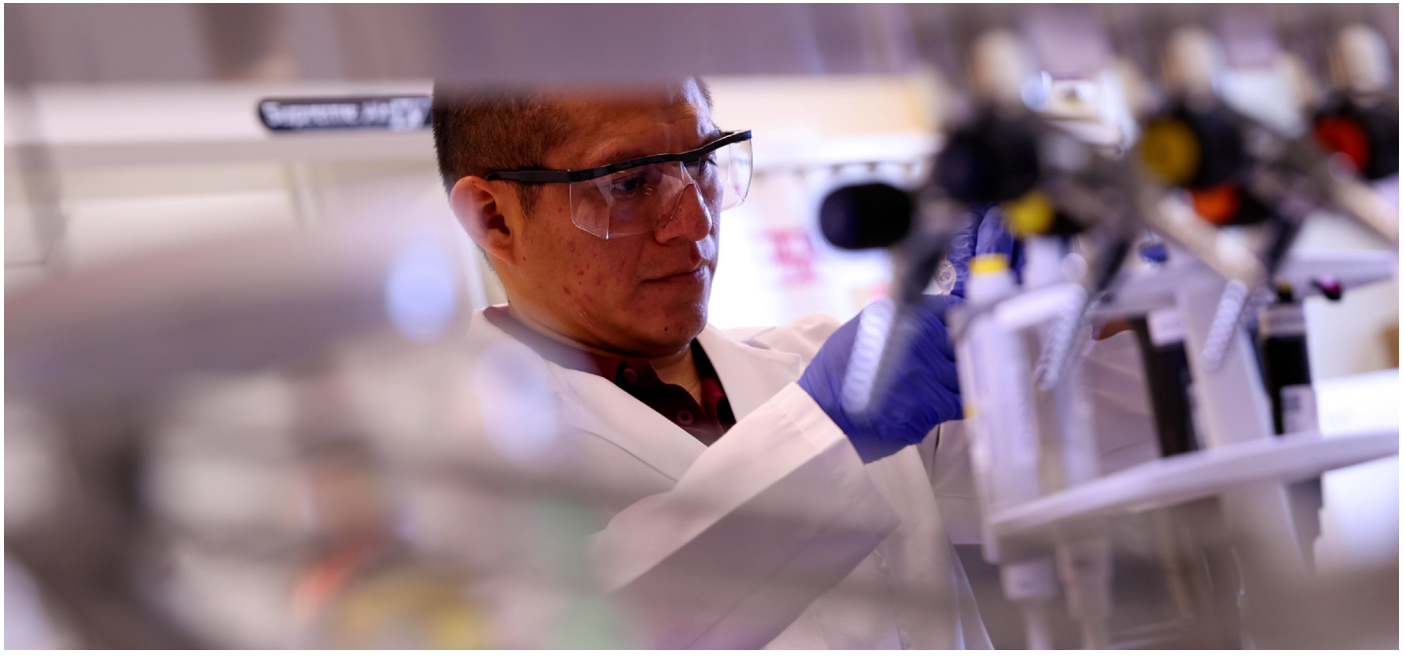
"We need to make the public aware of the resources available to them," said Over. "More companies are relocating or developing in Southwest Virginia. People are looking to invest in the region. We are here to help the public make the most out of opportunities."

Many services available:

- Provides access to the United States Patent and Trademark Office databases such as Patent Public Search and Trademark Electronic System.

- Directs you to information about applying for a patent or trademark and explains the application process and fee schedule.

- Provides a directory of local patent attorneys licensed to practice before the United States Patent and Trademark Office.

- Offers workshops on intellectual property and one-on-one consultations.

- Does not provide legal services as University Libraries' experts are not lawyers and cannot give legal advice or conduct searches on your behalf.

"Anyone can take advantage of the center," said Over. "Someone with a big idea may feel excluded because they live in a rural area and don't know where to start. Now a local entrepreneur or manufacturer who invented something and would like to patent it can come to our center in Newman Library to help find the resources they need to start the process. They are not left behind. This could have an impact on the economic development of the whole region."

Virginia Tech's LICENSE and LAUNCH teams currently help guide the university's faculty in matters of technology commercialization — a key part of that is patent and trademark protections. This new center will be a positive addition and valuable resource for the region's inventors and the university community.

"This center will benefit LICENSE because much of their time is spent conducting market research, prior to research, and negotiating licenses for technologies owned by Virginia Tech," said Connie Stovall, University Libraries' director for research and impact intelligence, who works directly with LINK + LICENSE + LAUNCH. "Having said that, faculty sometimes conduct due diligence on their own before disclosing their inventions to the LICENSE team. It will benefit faculty to have a place to learn more about patents, patent searching, and the patent application process. Also, LICENSE does not serve the student body or the community at large, so the PTRC will serve as a great source of information for them as well."

Library faculty led the drafting and finalization of the university's Faculty Statement on the Responsible Use of Research Metrics

Endorsed by Virginia Tech's faculty senate on April 21, 2023, the Virginia Tech Faculty Statement on Responsible Use of Research Metrics is the university's first statement on the responsible use of research metrics, based on the Leiden Manifesto for Research Metrics, but with an emphasis on issues specific to Virginia Tech.

The university's statement provides support and guidance to the Virginia Tech community on implementing a more inclusive and fair assessment of faculty and other researchers. This statement provides guidance for communicating explicit expectations during hiring, annual evaluations, and promotion and tenure. It also helps provide a unified faculty voice in advocating for a healthy, encouraging, and diverse research environment.

The statement covers the following nine points:

- Assessment of individual researchers should be based on a qualitative judgment of their portfolio, and quantitative metrics should support, not supplant, qualitative, expert assessment.

- Measure performance against the research missions or values of the institution, group, and/or researcher.

- Protect excellence in locally relevant and community-engaged research.

- Keep data collection and analytical processes open, transparent, and simple.

- Allow those evaluated to verify data and analysis.

- Account for variation by field in publication and citation practices as well as the age of the output(s) being evaluated.

- Avoid misplaced concreteness and false precision.

- Recognize the systemic effects of assessment and indicators.

- Scrutinize indicators regularly and update them.

For the full statement, visit the Virginia Tech Faculty Senate website facultysenate.vt.edu/Statements/responsible-research-metrics.html.

Students, staff, and faculty can borrow equipment for the semester through the Studios Technology Lending Desk on Torgersen Bridge. Photo by Chase Parker for Virginia Tech.

Long-term technology lending collaboration with TLOS meets a need

University Libraries at Virginia Tech partnered with Technology-enhanced Learning and Online Strategies (TLOS) to launch a semester-long technology lending program for the 2023-24 academic year. This initiative provides faculty, staff, and students access to cutting-edge equipment for research, teaching, and collaborative projects free of charge.

Under this program, individuals applied for a long-term loan of equipment including university high-end computers, 3D printers, DSLR cameras, 360 cameras, VR headsets, eye-tracking equipment, iPads, and more.

"Being able to provide this equipment to students so they can pursue whatever project they want is incredibly valuable to us and something that we think is important. We want to make sure that every student who comes here has an opportunity regardless of their financial situation or economic status," said Alice Rogers, University Libraries' manager of Studios Media and Lending Services.

This program marks an important step toward creating an inclusive and supportive academic environment by offering recipients access to equipment that they may not be able to get otherwise.

"University Libraries is taking an active role in lending technology to people on campus. Some departments will lend to their specific unit, and some may lend a little more broadly based on different factors. But the Studios Technology Lending Desk is the kind of center

that loans to all students, all faculty, and all staff," Rogers said.

In the past, the Studios Technology Lending Desk has only offered a week-long lending service. The seven-day time span created challenges for patrons borrowing equipment that is more difficult to use and for those needing equipment for an extended amount of time to complete a project.

University Libraries hopes that running the semester-long lending service in tandem with the week-long option will meet the demands of the university community.

"Long-term lending allows us to meet a demand that we've previously been unable to meet. People have come up to us and said, 'This isn't enough time. Is there a way for me to have more time with this equipment?' I think that this will help us support a lot more of the research and teaching projects that have been a challenge for us to meet in the past," said Jonathan Bradley, assistant director of learning environments and innovative technologies at University Libraries.

For the program's pilot year, organizers used a weighted random lottery that determines equipment recipients. This lottery system gave preference to patrons requesting the equipment for teaching or research projects, or for uses involving a library or TLOS partnership. The library received double the number of applications that it had equipment to loan. Program organizers are planning to obtain a larger library of technology to meet future needs.

IN CONCLUSION

University Libraries at Virginia Tech is committed to elevating the university's global work and reputation and providing Hokies the resources and opportunities they need to create, innovate, and share knowledge, scholarship, and research with the world. Library faculty's dedication to student success pushes our work beyond traditional library services into novel approaches to experiential learning, open educational resources, and research support.

The library's strategic plan is the roadmap to ensure services align with the university's strategic plan and make a difference in the university's mission. We look forward to the year ahead and continuing to make a difference for all Hokies.

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Change service requested

lib.vt.edu