Faculty & Staff Scholarship

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The Research Repository @ WVU Impact Report, 2018-2020

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THE RESEARCH REPOSITORY @ WVU IMPACT REPORT 2018-2020
The Research Repository @ WVU was launched in October 2018 to serve as the institutional repository for West Virginia University and a cornerstone of the WVU Libraries Scholarly Communications & Publishing Program. The repository collects, preserves, and showcases creative and scholarly works from WVU faculty, staff, and students and makes them available to readers worldwide.

The Research Repository supports the mission of West Virginia University by promoting the advancement of high impact research and global access to scholarship, creative works, and educational materials. Through the repository, visitors worldwide can view:

- Journal articles and manuscripts
- Theses, dissertations, and problem reports
- Digital and multimedia projects
- Datasets
- Technical reports and white papers
- Undergraduate research
- Posters, presentations, and conference proceedings
- Open educational resources

WVU students, faculty, and staff are encouraged to deposit their work.

This report highlights the growth and impact of the Research Repository since its launch in October 2018. Statistics reported are accurate as of November 30, 2020.
Repository totals

- 44,623 total works posted
- 984,408 total downloads
  - 1,470 in 2018
  - 212,114 in 2019
  - 770,824 in 2020 (through November 30)
- Downloads came from 223 countries

Most downloaded collections

1. Graduate Theses, Dissertations, and Problem Reports: 713,350 d
2. West Virginia Law Review: 102,023
3. Faculty & Staff Scholarship: 64,200
4. West Virginia Agricultural & Forestry Experiment Station Bulletins: 22,900
5. Fixation Database of Film and Animation: 13,250
6. Web Book of Regional Science: 11,177
8. Regional Research Institute Working Papers: 7,688
10. Clinical and Translational Science Institute: 4,807
Top ten countries by downloads

1. United States: 519,702
2. China: 64,798
3. India: 33,125
4. United Kingdom: 29,161
5. Canada: 22,033
7. Russia: 18,797
8. Singapore: 15,309
9. France: 13,530
10. Australia: 12,379

Automatic hydraulic fracturing design for low permeability reservoirs using artificial intelligence (Dissertation, Statler College): 7,527

Effect of well configurations on productivity index of gas well producing from shale (Thesis, Statler College): 6,581

Syntheses and Structures of Functionalized Carbon Nanohoops (Dissertation, Eberly College of Arts and Sciences): 5,884

Different Shades of Bias: Skin Tone, Implicit Racial Bias, and Judgments of Ambiguous Evidence (WV Law Review): 5,702


Entertaining a False Reality: A social comparison examination of beauty pageant participation and the effect on body dissatisfaction, depression, and self-esteem (Thesis, Reed College of Media): 4,088

Contemporary Music Notation for the Flute: A Unified Guide to Notational Symbols for Composers and Performers (Dissertation, School of Music): 3,343

The Ku Klux Klan’s portrayal of African Americans in mass media technology (Thesis, Reed College): 3,336

Collections

**West Virginia Agricultural And Forestry Experiment Station Bulletins (AgNic)** is a periodical published irregularly since the late 1800s. A project to digitize the issues was processed by the WVU Libraries. Because this was a complete digital collection, it was earmarked as the first collection to be added to the Research Repository @ WVU. Elements of this project included workflow creation, batch upload processing, and assigning Digital Object Identifier (DOIs). The 727 works from this collection have been downloaded 22,900 times across 628 institutions and 152 countries.

**Graduate Theses, Dissertations, and Problem Reports** became the only author-submitted portal for electronic theses, dissertations, and problem reports (ETDs) in October 2018. Since that time, back files of ETDs housed on library servers and in a commercial database behind a paywall (ProQuest Theses and Dissertations Global) have been loaded to the collection via batch processing. The primary advantage to having the ETDs in the Research Repository is that the files are openly accessible. ETDs in the collection are assigned Digital Object Identifiers (DOIs). Work continues to confirm that all available ETDs have been added to the repository. As of November 30, 2020, there are 7,276 works posted in the collection which have been downloaded 713,350 times across 16,729 institutions and 217 countries.

The **WVU College of Law** collections include Law Faculty Scholarship, the C. Edwin Baker Lectures, and the West Virginia Law Review, a professional, student-governed legal journal that publishes articles of interest to legal scholars, students, legislators, and members of the practicing Bar. Works from the collections have been downloaded 158,531 times across 6,276 institutions and 203 countries.
An Introduction to Earth Science is a collection of illustrations, lesson plans, field trips, and other educational materials created by the late Professor John Renton over the course of his 50 years of teaching. In October 2018, Barbara MacLennan and Professor Renton of the WVU Geology and Geography Department contacted the Libraries seeking options for publishing Renton's materials, his wish being to make them freely available to K-12 Earth Science Teachers in West Virginia and beyond to help learners of all ages appreciate and understand geology, the landscape of the Earth, and the solar system. Since their publication, Professor Renton's materials have been downloaded 2,317 times across 134 institutions and 85 countries.

The Fixation Database Collections are the work of Jeffrey Moser, Professor in the WVU College of Creative Arts School of Art & Design. The project aims to create a visual database of film, animation, music videos, and video games in which every frame of the work in question is displayed simultaneously in a grid. Currently, the repository includes fixation databases for Film and Animation, Music Videos, and Video Games. In total, these collections include 7,107 items which have been downloaded over 19,214 times across 129 countries.

The West Virginia University Herbarium is the largest facility of its kind in the state, containing approximately 200,000 mounted and cataloged plant specimens. The Herbarium is collaborating with the WVU Libraries to digitize the collection and make it available for viewers through the Research Repository.

The Web Book of Regional Science is a collection of materials published by the WVU Regional Research Institute. These materials cover a wide range of regional science topics, and are used by teachers and professionals worldwide as references and instructional resources. They have been downloaded 11,177 times across 956 institutions and 155 countries.
Projects

**Faculty Deposit Service (FDS)** provides WVU faculty with the opportunity to have their publications reviewed by library staff to determine which works are eligible to be deposited in the Research Repository in accordance with publisher and journal policies. Since its inception in late Fall 2018, the program has resulted in:

- 27 faculty publication lists reviewed, totaling 943 scholarly works
- 547 of the 943 works (58%) deemed eligible for deposit (either as a preprint, accepted manuscript, or publisher’s PDF)
- 114 of the 547 eligible works (21%) deposited in the Research Repository

The drop off between the number of works eligible for deposit and the number of works deposited is due to library staff lacking access to versions of works eligible for deposit. In many cases, publishers allow for the deposit of preprint or accepted manuscript versions of published articles but not the final publishers’ PDF. While library staff can usually obtain publishers’ PDFs when these are eligible for deposit, accepted manuscripts and preprints are generally not publicly available, and must be obtained directly from faculty. In many cases, faculty do not retain these versions of their publications or respond to requests for these versions. However, if the statistics above are representative of published research by WVU faculty, then at least 50% of such research may be eligible for deposit in the repository. Given the evidence that open access articles receive more citations than average [1], an increase in faculty retention of accepted manuscripts and preprints and sharing these versions via the repository has the potential to significantly increase the impact of WVU research.

Student Remote Work - Adding Open Access Publications. Beginning in March 2020, there was a need to identify remote work projects for library student employees due to the disruptions of the COVID-19 pandemic. During this time, three student workers assisted in the deposit of open access publications from WVU faculty into the Research Repository. The scholarly communications librarian identified open access publications with at least one WVU-affiliated author using the Web of Science database ranging from 2013-2019. Students workers deposited materials for the remainder of the spring semester, and one continued to work on the project throughout the summer. Through the duration of this project, 1,576 items were posted to the Faculty & Staff Scholarship collection, approximately 58% of the collection's total works (2,735).
Journal Publishing
At present, the Research Repository hosts the *West Virginia Law Review* (published by the WVU College of Law), the most recent issue of *Calliope* (WVU’s undergraduate literary journal), the *Mountaineer Undergraduate Research Review*, and the *West Virginia University Historical Review*. In addition to these publications, several additional journals are on track to be published in the coming year:

- *The White Papers of the Council for West Virginia Archaeology*
- *The Wick* (an undergraduate humanities journal based at Potomac State College)
- *Open Paleontology*
- *The Journal of the Campus Read*

Open Educational Resources (OER)
Currently the Research Repository hosts a small collection of Open Educational Resources, including *West Virginia History: An Open Access Reader*, the *Hidden Figures* collection, and *An Introduction to Earth Science*. Going forward, we hope to include more OER created by WVU instructors, particularly materials created with support from the WVU Libraries and the WVU Teaching and Learning Commons *Open Educational Resources Grant*. 
FUTURE GOALS

- Educate faculty and others researchers on the value of retaining and depositing preprints and accepted manuscripts to increase deposit rates
- Capture and showcase more undergraduate research associated with annual events such as the Summer Undergraduate Research Symposium, the Undergraduate Spring Symposium, and Undergraduate Research Day at the Capitol
- Increase deposit rates of capstones and honors theses
- Promote the use of the repository for archiving and sharing datasets
- Capture content from conferences, symposia, and speaker series held at WVU.