

BUILDING ON STRONG FOUNDATIONS

BERNARD BECKER MEDICAL LIBRARY
FY2018 ANNUAL REPORT



Washington University in St. Louis

SCHOOL OF MEDICINE

World-class collections for students, faculty and staff

1,641
Audiovisual
items

4,926
Print
journal
titles

Audiovisual
items
used
37
times

79,536
Print
book
titles

Print
journals
used
56
times

7,498
E-journal
titles

Print
books
used
4,517
times

57,254
E-book
titles

E-journal
articles accessed
2,879,656
times

22
Paid
database
subscriptions

E-books
used
701,072
times

**Top five
e-journals**
Top 5 were used
347,169
times total

Nature
132,745
uses

PNAS
75,040
uses

673
Faculty/staff
borrowed
materials

928
Students
borrowed
materials

391
Residents/fellows
borrowed
materials

Cell
62,217
uses

Journal of
Biological
Chemistry
42,306
uses

JAMA
34,861
uses



*Cutting-edge services for
researchers and clinicians*

Accelerating Research

Our primary focus is supporting a cutting-edge research university with innovative tools and services.

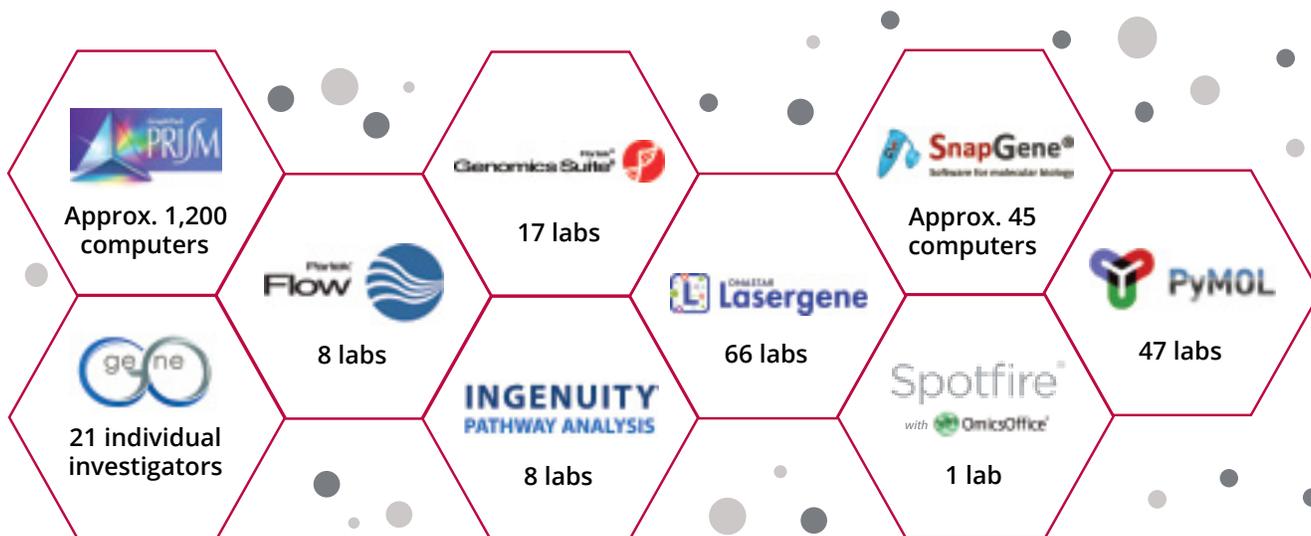
Research Computing

In partnership with the Center for High-Performance Computing (CHPC), Becker Library support scientists continued to offer a series of hands-on workshops aimed at introducing the basics of research computing to faculty, staff and students. The popularity of these free workshops continued to grow during FY18 and repeat sessions were needed to meet the demand. During FY18, 20 sessions were offered with a total attendance of 621 faculty, post-docs, staff and students.

The series is now offered three times a year with new workshops developed for introductions to both R and Python. Becker Library and CHPC also began discussing a potential collaboration with the Institute for Informatics to develop additional training that builds on the success of the library and CHPC's existing workshops.

SOFTWARE LICENSING PROGRAM

Since 2005, Becker Library has offered reduced pricing on specialized research software tools. These tools are widely used on campus by both entire labs and individual investigators.



COLLABORATION WITH CAMPUS RESEARCH GROUPS

The library partners with the Center for High Performance Computing to maintain and enhance a local installation on the CHPC cluster of Galaxy, a web-based bioinformatics analysis tool that allows biologists without a programming background to perform data-intensive analyses. At the end of FY18, 40 researchers had generated Galaxy accounts to use this resource.

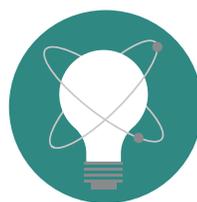
The WashU Galaxy installation is used by the library's support scientists to deliver next-generation sequence training to pathology residents. During the past year, three sessions were offered and attended by 13 residents.

FY18 marked the third year of a collaboration with the Center for Genome Sciences & Systems Biology and the McDonnell Genome Institute to host and manage a local mirror of the Kyoto Encyclopedia of Genes and Genomes (KEGG), a popular resource for understanding high-level functions and utilities of the biological system. According to Google Analytics, since 2015, approximately 1,767 users from both campuses have accessed the KEGG database.

The library also partners with CHPC to host and support an installation of Partek Flow, a web-based software application designed specifically for the analysis of next-generation sequencing data including RNA, small RNA and DNA sequencing data. During the past year, the number of subscriptions doubled and there are now eight labs using the platform.

OTHER WORKSHOPS, PRESENTATIONS AND TRAININGS

- PyMOL – 34 attendees
- Partek Flow – 2 sessions, 41 attendees
- IPA Lunch-and-Learn – Approximately 20 attendees
- 2017-2018 Genomics in Medicine Lecture series – Presentation on research software resources on campus with Malcolm Tobias from CHPC



#SciCommThursdays

A monthly series about **Communicating Your Science.**

In 2017, Becker Library launched the #SciComm Thursdays series in partnership with the Institute for Clinical and Translational Sciences (ICTS). The goal of the series is to highlight the importance of effectively communicating science and research and to create an educational forum for sharing expertise and information with the campus community.

In the fall semester, the series focused on formats for science communication (social media, oral presentations, elevator pitches). In the spring semester, the focus shifted to communicating with specific audiences (lay public, funders, other researchers, the media).

Each session included presentations by subject experts from Washington University faculty and communication professionals from the community. Approximately 300 people attended the eight total sessions, including faculty, staff, students, post-docs, administrators and members of Washington University Medical Center and ICTS community. After receiving positive feedback, the series continues in FY19.

Author & Publishing Support

The variety and complexity of questions and requests for assistance again grew in FY18. Requests come from virtually every user group on campus including graduate and medical students, post-docs, early-career investigators and clinicians, faculty members, and administrative staff.

Librarians provided assistance such as:

- Navigating a wide range of copyright questions on published works, course materials, images, developed software, copyright transfer agreements and granting permission for re-use of works, including guidance on fair use and Creative Commons license information
- Assigning DOIs to authored works
- Providing guidance on authorship roles
- Establishing an ORCID ID
- Correcting author names in database citations
- Using data repositories for supplemental data
- Developing a “Tools for Authors” online subject guide (an ongoing effort), which was viewed 6,300 times during FY18

A notable trend during the past year was an increasing desire for information and guidance on selecting a journal for publication. In addition to consultations with individuals and groups, the library developed a class on selecting a journal attended by 20 people and an online reference guide that was viewed 10,746 times during FY18.

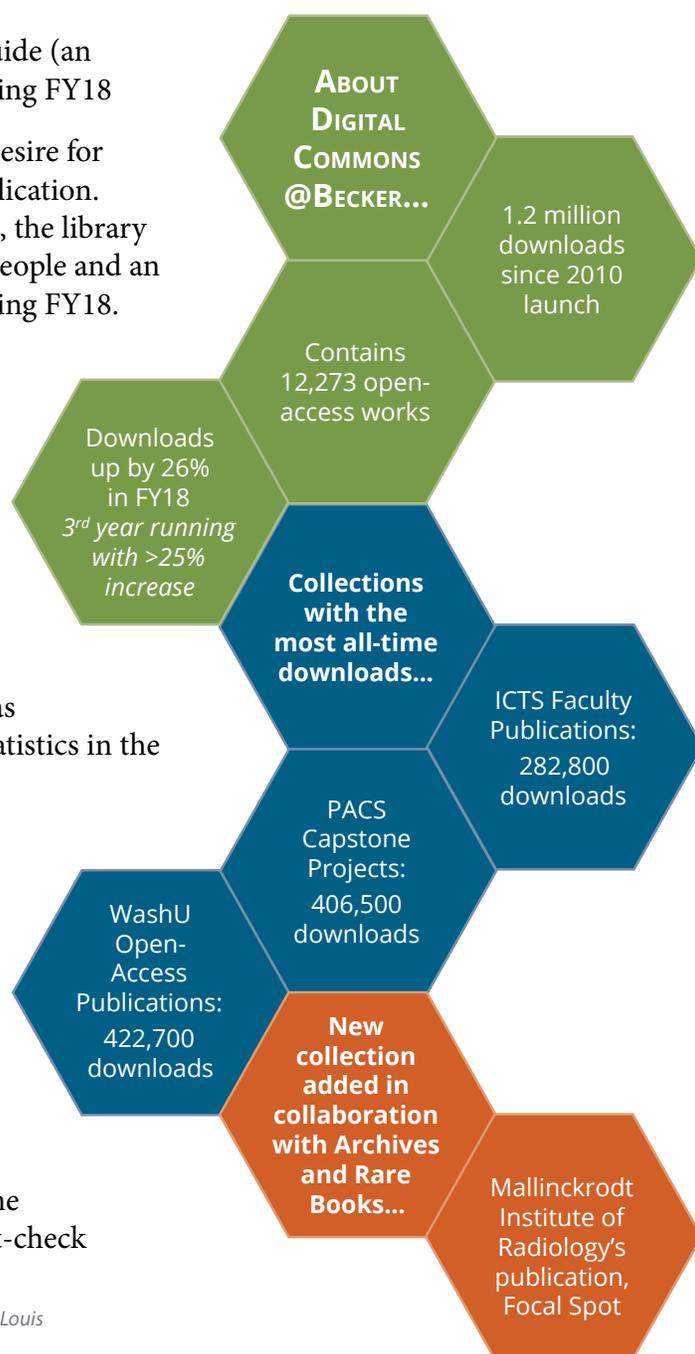
The popular “Enhancing the Visibility & Impact of your Research” class was presented three times during FY18 and was attended by 43 faculty, staff and students.

DIGITAL COMMONS@BECKER

Since 2010, Becker Library has supported the dissemination and promotion of the medical school’s research efforts and scholarly works through its digital repository, Digital Commons@Becker. The repository has continued to grow and thrive, as demonstrated by the statistics in the graphic to the right.

SUPPORTING NIH-FUNDED RESEARCHERS

Support for NIH-funded researchers and authors remains an active and growing area of service. Since 2006, Becker Library and the Office of the Vice Chancellor for Research have worked together to promote compliance with the NIH Public Access Policy. Services include contacting publishers and NIH manuscript submission (NIHMS) on behalf of NIH-funded authors, running publication reports to determine compliance status for applicable publications and to spot-check



publications that may have omitted acknowledgment of a grant award, submitting manuscripts to NIHMS, and providing guidance on proactive compliance.

Over a two-month period from May to June 2018, Becker Library handled approximately 100 emails requesting assistance with the NIH policy. To date, the library has submitted 278 articles to NIHMS on behalf of NIH-funded authors helping Washington University achieve a 95% compliance rate with the NIH Public Access Policy for the time period 2008 to present (22,100 articles).

Assistance with other NIH and National Center for Biotechnology Information (NCBI) author tools is also in high demand. Librarians have again focused on education and support for NIH Biosketch, NCBI My Bibliography and SciENcv. Five presentations (72 attendees) were held on NIH Public Access Policy and NIH Biosketch. Becker Library's NIH Biosketch online resource guide received 10,499 views during FY18.



Image: "Dividing cells showing chromosomes (purple) and cell skeleton (green)." Nasser Rusan, National Heart, Lung, and Blood Institute, National Institutes of Health, used under CC BY-NC 2.0, cropped and color adjusted from original

Research Analytics & Impact Evaluation

Requests for assistance with research analytics and impact evaluation increased dramatically in FY18, as did the scope and depth of analysis requested. In FY18, the library's research analytics and evaluation unit provided reports and services to 23 departments, centers and administrative offices. The popularity of these services led directly to the library adding another research and publishing support librarian at the end of FY18 to keep up with the ongoing increase in demand.

Along with the increased demand, the past year also demonstrated the many creative ways the user community wants to apply the library's tools and expertise to analyze specific questions and areas of interest. Examples include visualized reports such as choropleth geographic maps that display worldwide co-authorship patterns, co-author network maps that display collaboration among authors, and word clouds that display topics to demonstrate trends or areas of expertise.

Reports, graphs, tables and author network maps were also generated for a wide variety of purposes including departmental productivity and performance, departmental retreats, benchmarking against similar groups, narratives for promotion and tenure, university performance in specific subject areas, global collaboration, longitudinal tracking of trainees, demonstrating collaborative efforts for grant proposals or renewals, and analyzing distribution and frequency of invited lectures.

Support for the Institute of Clinical and Translational Sciences

Becker Library provides ongoing support for ICTS through librarian participation on the ICTS Tracking and Evaluation Team. A new project initiated during the past year was developing the Translational Science Benefits Model (TSBM), a framework for assessing the health and societal benefits of clinical and translational sciences. The TSBM was inspired by the desire to look beyond "science begets science" counts of the medical enterprise to identify examples of real-world clinical and community health impacts that result from translational science research. Becker librarians identified the case studies that were used to provide a contextual narrative to illustrate the TSBM. A paper was

published in September 2017, and a website is launching in fall 2018. Other activities in support of the Tracking and Evaluation Team included preparing publication reports and performing citation analysis for the 2,700 ICTS members and recommending metrics for evaluation purposes.

Systematic Reviews

Becker librarians are national leaders in systematic review literature searches. For the second year in a row, Becker Library offered a two-day systematic review workshop which attracted librarians from across the U.S. and received excellent reviews from participants.

The number of systematic reviews completed for patrons in the medical center has maintained an upward trend, with a record 72 search packages sent out in FY18. Librarians were named as authors on:

- “Decision making in pediatric hematopoietic cell transplantation: Influential factors vary among diseases”
- “Father’s Stress in the Neonatal Intensive Care Unit: A systematic review”
- “Use of short message service and smartphone applications in the management of surgical patients: A systematic review”
- “Using wearable technology to predict health outcomes: a literature review”

Becker Library has also undertaken a yearlong product trial to evaluate a systematic review management tool for purchase consideration. The tool manages, tracks and streamlines the screening, data extraction and reporting processes of systematic reviews, which could potentially be of great use to researchers in the medical center.

In collaboration with the Office of Medical Student Education (OMSE), Becker librarians peer-reviewed a Best Evidence in Medical Education (BEME) Collaborative systematic review proposal. The School of Medicine is a BEME Collaborating Center with OMSE faculty on the BEME board.

Because of Becker librarians’ systematic review expertise, they were also asked to participate in an Institute for Informatics usability study to evaluate an interactive analytic program which aids in the visualization of large-article retrievals.

Enriching Teaching

We train students to be thorough and agile researchers who can lead in the age of the physician-scientist.

Practice of Medicine Course

Becker Library has continued to strengthen its partnership with the Office of Medical Student Education with the goal of training students to become life-long learners. Each year, librarians provide evidence-based medicine instruction to students within the Practice of Medicine course. This year the session was reformatted into



a small group exercise that facilitated interactive learning. A post-course survey provided valuable student feedback that will help librarians refine elements of the instruction for the coming year.

Institute for Public Health and Clinical Investigation Students

Since 2012, Becker librarians have been part of an Institute for Public Health course, Systematic Reviews and Meta-Analysis, where they provide an overview of the systematic review process then consult with and provide expert searching skills for students completing systematic reviews.

This year a Becker librarian also lectured in a Clinical Investigation Program course, Foundation of Healthcare Research, where evidence-based medicine elements were taught with an emphasis on critical appraisal of study methodologies within the literature.

Graduate Medical Education

In FY18 a Becker librarian served as co-instructor in a Teaching Physician Pathway project, comparing peer-teaching to faculty-led teaching during a third-year medical student ambulatory medicine rotation. The peer-teaching cohorts were given a self-directed learning assignment with a librarian-created grading rubric. A librarian then provided information-seeking skills feedback to each student.

BioMedRAP Summer Program

FY18 marked Becker Library's first partnership with the Division of Biology and Biomedical Sciences (DBBS) summer program, BioMedRAP, which recruits exceptional undergraduate students interested in careers in biological and biomedical sciences for a 10-week lab experience culminating in an independent research project.

Early in the summer program, Becker librarians provide a hands-on database-searching and citation-management session for 30 students. This Becker Library-DBBS collaboration lays the foundation for a future core-skills course for doctoral students.

Diversity Outreach

A librarian is a long-time participant in the Office of Diversity, Equity and Inclusion's Saturday Scholars program, which provides a forum for 16 local public high school students to learn about human anatomy in both lecture and lab environments while interacting with medical students.

As part of a longstanding partnership, Becker Library and the Division of Biology and Biomedical Sciences promote an annual traveling poster series highlighting notable African Americans in science and technology.

24/7 Library Building Access

In response to student feedback, Becker Library evaluated and adopted a policy to allow students to use the library 24 hours a day, 7 days a week.

Staff worked with the Office of Facilities Management and Protective Services to create procedures and mechanisms for allowing after-hours access to students.

Becker Library now provides an around-the-clock option for students looking for a safe, quiet place to study.

Health Literacy and Communication Skills

The library's health communication specialist saw an increase in the requests for customized presentations during the past year. There were approximately 384 attendees at presentations covering a wide variety of topics, including health literacy basics, plain language and empathy. Health literacy lectures are now embedded in the curriculum for medical, physical therapy and occupational therapy students (with occupational therapy added this past year).

Strengthening Patient Care

We bring expertise and thoughtfully curated resources to clinicians at the point of decision-making.

Clinical Support

Now in its third year, the clinical rounding service continued to increase time spent on the medical units. Four librarians participated in interprofessional medical teaching rounds for a total of 30 hours. The service became more structured with librarians gaining access to the rounding schedule, receiving training to understand patient presentations and implementing standardized point-of-care tools.

A clinical librarian is an active participant on the following hospital committees: Evidence-Based Practice, Evidence-Based Best Practices – Patient Experience Pillar Group, Enhanced Recovery After Surgery (ERAS) Operations, ERAS Patient Engagement and Education, Multidisciplinary Research Council and Magnet Recertification.

Family Resource Center

Becker Library maintained its longstanding partnership with the St. Louis Children's Hospital (SLCH) Family Resource Center (FRC) during FY18. Working alongside SLCH nursing professionals, Becker Library's consumer health librarian provides health information services and educational materials to patients and their families and represents Becker Library and the FRC at community outreach events. Highlights from the past year include:

- Working as part of a team with SLCH nursing staff to introduce patients and their families to the OneView information and education system now installed in patient rooms
- Expanding an "inter-library loan" program with the SLCH Specialty Care Center to include the Psychology Department and more books for the Nurse Navigator
- Leading a workshop with the health communication specialist from Becker Library on "Finding Reliable Health Information Online" at the St. Louis Regional Library Network in fall 2017
- Presenting to the St. Louis Special School District Agency Collaboration Meeting to share FRC resources with other community agencies

Feuerstein Health and Wellness Information Center

In FY18, staff began the planning and design process for the Feuerstein Health & Wellness Information Center, a collaborative project with Human Resources' Wellness Connection and the SLCH Family Resource Center. The center will leverage library resources to provide access to trusted print and online consumer health and wellness information tailored to the needs and interests of the staff and students of the WUSM community.

Health Literacy and Plain Language Review Service

Notable FY18 projects revising and tailoring written materials to meet the average adult's health literacy needs included working with the Plastic and Reconstructive Surgery Division to review and revise materials designed for educating cleft palate patients, and working with the Department of Surgery to calculate reading levels of patient materials regarding the use of opioids post-surgery.

Preserving the History of Medicine

We conserve and retain a renowned collection of rare books and archival material for posterity.

Serving Scholars of History

The significant archival and rare book collections of Becker Library were well-used in FY18, with 2,074 items requested by patrons. A project archivist was hired in the spring of 2018 for a year-long metadata project to improve public access and discovery of the library's extensive historic photograph collection. The library also awarded three travel scholarships to scholars living more than 100 miles from St. Louis, which allowed each to spend several days working with the library's rare book and archival collections.

Major Acquisitions

Richard Chole, MD, former head of otolaryngology, donated 78 volumes of rare otolaryngology books from the 17th to mid-20th century to Becker Library. A reception honoring his generosity was held on Sept. 21, 2018. The library also purchased 11 rare monographs from the 16th to 18th century that focus on practical medical remedies. Following the death of William Landau, MD, in November 2017, the Department of Neurology transferred papers documenting his 58-year tenure to the archives.

Outreach

The Special Collections Book Club kicked off on June 27, 2018, where eight members discussed Nina Siegal's "The Anatomy Lesson." The Annual Display of Rare Anatomical Texts, held on Dec. 20, 2017, attracted over 100 visitors. The library also sponsored six Historia Medica lectures, one of which was presented by archivist Philip Skroska in conjunction with his exhibit opening in the Glaser Gallery. Another exhibit of archival material and two exhibits of rare books were done in the Glaser Gallery during FY18.

Staff presented to medical students in the selectives "Introduction of Medicine," "History of Epidemics," and "Medicine and War" in collaboration with the Center for History Of Medicine.

Staff assisted with research and providing images for local author Candace O'Connor's book "Renaissance: A History of the Central West End" and were featured in interviews for the accompanying Nine Network documentary "A Place Worth Saving." The book and documentary were released in the fall of 2017.

Participants in the Mini-Medical School continuing education program viewed rare texts and artifacts in fall 2017 as part of the division's ongoing participation in the Mini-Medical School.



BERNARD BECKER MEDICAL LIBRARY

Books, journals and databases

Assistance searching the literature

Clinical support

Systematic reviews

Science and informatics support

Publishing and evaluation services

Health literacy and communication services

Special collections

becker.wustl.edu

