CONSERVING BERTRAND LIBRARY’S RARE AND UNIQUE COLLECTIONS
by Isabella O’Neill, Curator of Special Collections/University Archives | ioneill@bucknell.edu

The mission of Special Collections/University Archives (SCUA) is to collect, preserve, and provide access to unique and rare materials, including Bucknell University’s historical records. To achieve its mission to preserve collections requires monitoring and evaluating the physical condition of materials so they are protected in the best manner possible and will remain available to future researchers. During the past year, special funding allowed SCUA to take its preservation efforts one step further by contracting with professional conservation services to stabilize and repair the damage on two important and valuable items:

Charter of the University at Lewisburg

Bucknell University is most fortunate to have retained its primary historical record: the charter of the University at Lewisburg (the former name of Bucknell University) written by Acting President Stephen W. Taylor and signed by Pennsylvania Governor Francis R. Shunk in February 1846. For a number of years, the charter was framed and displayed in the President’s Office until its transfer to the university archives collection in fall 2012. Upon its arrival, the condition of the parchment, ink, and the framing were evaluated. We also considered how this important university record could be shared with the campus and others in a visible spot while ensuring the charter remained in an environment that protected it from theft and further damage. Thanks to a gift from the Friends of the Bertrand Library Fund, arrangements were made with Conservation Center for Art and Historical Artifacts (CCHA) in Philadelphia for a condition appraisal and treatment plan to conserve the charter.

The charter was unframed and the parchment and ink tested for stability. When the frame was removed, they discovered soft paper fibers covering much of the front of the document and extensive creasing and weakening of the parchment throughout. The paper seal was also creased and torn in parts. In May 2012, SCUA received the charter in its conserved state, which has helped to guarantee its preservation in the future. A facsimile of the charter hangs in the Traditional Reading Room of the Bertrand Library.

The Birds of Europe

One of the more interesting titles in special collections is John Gould’s The Birds of Europe, published in London in 1837. The five volume set consists of descriptive letterpress text and large, water colored plates of European birds. Each volume is bound in full green leather with a gold tooled title on the side, gold tooled raised bands on the spine, and the initials “Audubon FRS” in gold tool on the front covers. (Although not confirmed, it is thought that this copy was owned by James Audubon.) Its physical condition indicated damage assumed from use and a lack of proper housing that caused scratching and scuffing of the leather. Loose or broken hinges connecting the covers to the spine made the book unstable.

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This summer, Bucknell University was awarded a four-year grant for $700,000 to support the Bucknell University Digital Scholarship Initiative. This grant from the Andrew W. Mellon Foundation will support faculty development, course development, summer research, and outreach that will result in a stronger program of digital engagement at Bucknell. With the support of the Mellon Foundation, Bucknell plans to create an institutional climate that embraces the advantages of digital scholarship: transparency, collaboration, accessibility, experimentation, and a critical approach to technology. The University community sees this initiative as a catalyst for re-thinking Bucknell in the 21st century.

Bucknell’s project goals are:

- Improve the skills and knowledge of faculty members interested in using digital technologies in the classroom and in their research
- Encourage digital pedagogy and create more opportunities for student-faculty research and independent undergraduate research using digital technologies
- Create and offer courses that teach undergraduates about specific technologies in a liberal arts context
- Share knowledge, expertise and resources for the improvement of digital scholarship across institutions dedicated to undergraduate education

In order to respond to the increased demand for digital scholarship support, Bucknell conducted a study of current strengths and needs. During the summer and fall of 2012, members of the Bucknell faculty and staff participated in planning activities to discuss the concept of digital scholarship. These activities helped determine the most appropriate steps toward achieving the goal of broadening understanding of and access to new forms of digital scholarship.

Bucknell already has a strong library and information technology-based program to support the research of these exemplary faculty and has begun to connect the University to the larger community of digital humanists who consider questions relating to space and time. In November 2012, Bucknell hosted a conference titled, “GIS and Spatial Thinking in the Undergraduate Curriculum.” More than 100 faculty and professional staff from 51 institutions attended the three-day event. The conference convened leaders in the GIS community concerned with maximizing its value in undergraduate teaching and research. The Mellon Foundation’s 2010 grant to Bucknell, supporting GIS and environmental studies, helped to make this conference possible and helped to highlight the “Bucknell model” of technology support to peers.

Bucknell’s strengths in GIS provide a good starting point for building a strong digital scholarship program, but the University must also diversify its resources to include other digital technologies and pedagogies. We recently hired two Digital Scholarship Coordinators and a GIS/Web Application Specialist to achieve our strategic objectives. In Spring of 2014, we will also be opening a Digital Scholarship Center in Bertrand Library.

Digital Scholarship has only recently gained traction among some liberal arts schools, but each school is trying to do things individually. In August, I met with a number of colleagues from other liberal arts schools, and we agreed to coordinate our efforts. This could be a really powerful collaboration where we learn from each other, and share best practices and expertise.

If you are interested in learning more about Bucknell’s Digital Scholarship initiatives, projects, and events, please contact Andy Famiglietti (andrew.famiglietti@bucknell.edu) or Diane Jakacki (diane.jakacki@bucknell.edu), our Digital Scholarship Coordinators.

Cheers, Param
CONSERVING RARE COLLECTIONS

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Mr. William Minter, bookbinder and conservationist, prepared a treatment report and eventually proceeded with the work needed to stabilize and preserve the volumes. Mr. Minter’s greatest concern was the first pages or leaves of each volume adhering together or being sewn into the binding, which had caused the brittle pages to tear when one opened the books. He removed the first and last three leaves of each volume, washing and deacidifying them and reinserting them in the book in a manner that allows unrestricted opening. The water color plates were interleaved on alternative pages with a paper that will help preserve the colors as well as prevent further transfer of images to the adjoining pages. Mr. Minter designed custom, cloth covered spine drop boxes to protect each volume. The underlying material used to construct the boxes is aluminum, which does not add to the heavy weight of the volumes as they are moved to and from the shelves. Those interested in viewing The Birds of Europe may contact scua@bucknell.edu.

A BETTER PLACE FOR EVERYTHING: FOCUSING ON STUDENT LEARNING

by Kathleen McQuiston, Assistant Director for Research Services | kathleen.mcquiston@bucknell.edu

Students have long come to libraries to write papers, work together on class projects, get help conducting research and selecting sources, or simply to find a quiet place to study. Those activities have gotten easier at the Bertrand Library. The first floor of the Library recently underwent a variety of changes to improve it as a place for students.

Many students told us that they need computers located in places free of distractions, so we moved sixteen public computers from the first floor to quieter locations throughout the building. Not only did this provide students with quieter places to work, it also freed up space on the existing computer tables on the main level for collaborative work.

The most notable change is the creation of the Research Help Area. While the ASK Desk was a great place to ask directional and quick informational questions, trying to hold in-depth conversations in the middle of a bustling library proved difficult. In the Research Help Area, librarians can engage in research consultations with individuals or groups of students. The students receive individualized help, based on their research topics and their specific information needs. Students may just drop in or make appointments with a specific subject librarian.

Answers to directional and quick informational questions and circulation services are all now available at the Library Services Desk.
A HOLISTIC LOOK AT STUDENT DATA: AN UPDATE ON BUCKNELL UNIVERSITY INTELLIGENCE (BUI) PROJECT

by Mark Yerger, Director of Enterprise Systems | mark.yerger@bucknell.edu

The BUI Student Life Cycle Pilot Project Team has diligently pursued the objectives and outcomes discussed at the January 2013 Board of Trustees Meeting (see below). We now have over 25 key administrators trained and beginning to access student data in the data warehouse, including those from Athletics, Engineering, Arts and Sciences, and Student Life administrative staff. This has been accomplished through an new open access model that looks at “Student” data holistically rather than as data silos of the “Registrar”, “Admissions”, and “Financial Aid” offices. For the first time at Bucknell, student data “snapshots” have been established for point-in-time, period over period, comparative analytics on metrics such as retention rates over time and registration counts over time.

By looking closely at how we capture and use the data that feeds the data warehouse, we have identified and added new key metrics to our student data including indicators to track and report on our students in greater detail.

Over 20 reports and/or dashboards have been developed for production consumption by our staff. As part of this development process, the Degree Completion Working Group seized the opportunity to move from a culture of "Assessment" toward a "Performance" mindset by applying our new, validated warehouse data to the creation of a student retention scorecard. This scorecard will proactively measure our progress toward increasing our goals of increased retention.

As a result of these and other pilot successes, the overall BUI Program has taken a large step forward in the past several months. At a program level, we know there are months and years of work still ahead and many other efforts already underway in order to realize our long-term outcomes. One of these parallel efforts include formation of a BUI "author" working group to share and grow analytics best practices across offices. Another is the effort to document and define our key data in a BUI data dictionary that will be actively updated by data stewards and proactively researched by consumers and authors of BUI information. In addition, since January 2013, two reallocated Library and IT staff and one new Institutional Research staff member have been charged with an increased focus on the program and helping to grow and support the new culture of BUI.

Finally, the BUI Phase two project is now well underway. This effort will expand the scope of student data in the warehouse, fully move the legacy registrar office reporting to warehouse-based analytics, create some “foothold” analytics in the admissions and financial aid offices, and consider strategic questions tied to Presidential and Provost priorities. Phase two is targeted to complete in April 2014 and will be followed by projects to incorporate data from other functional areas of the institution.

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<th>OBJECTIVES</th>
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<td>Improve our capacity to create and monitor key performance measures, find data trends and exceptions and grow a culture of data-driven decisions across all divisions.</td>
<td>Increased data sharing of student data among offices and streamlined access rules</td>
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<td>Form a common data store and data access model, shared across all units that eliminates data silos and enables both strategic analytics and operational reporting.</td>
<td>Inclusion and quality assurance of student information in the data warehouse</td>
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<td>Enable point-in-time and historical data snapshots for dynamic analysis over time, such as admissions patterns, giving patterns, etc.</td>
<td>Production and testing of key baseline administrative reports that focus on student data</td>
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<td>Ensure comprehensive integration with Banner data, including adjusting our legacy business processes to maximize the value from this system.</td>
<td>Development and adoption of a scorecard or dashboard of metrics to help analyze and monitor our progress against strategic retention goals.</td>
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<td>Establish consistent use of data definitions, audit documentation, and data stewardship across multiple University dimensions</td>
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<td>Consolidate business intelligence tools to maximize our analytics competencies at all functional levels while minimizing the technical support footprint.</td>
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<td>Create executive dashboards for the members of the Operations and Management Group to assist with their deliberations and decisions.</td>
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COMING SOON: A BETTER WAY TO DISTRIBUTE SOFTWARE

by Bud Hiller, Manager of Technology Desk | bud.hiller@bucknell.edu

Bucknell offers a myriad of software for installation on personal (non-Bucknell owned) computers, but over the years, clients found (or didn’t find!) installers all over the place. We used to have CDs at the Tech Desk, and then the location moved to software folders on Netspace or our Knowledgebase. There was no single location to find software and no easy way to determine if license agreements allowed for software distribution to students or faculty/staff personal computers.

With the introduction of Library and IT’s new software download page for personal computers, everything changes! There is now a single location for all software that’s available for personally-owned machines. Students, faculty, and staff who access the page will find an easily accessible list broken down by operating system (Mac or PC) and availability. In addition, the page does not require VPN access or an on-campus IP address, so students or staff who are traveling can easily find and install the software they need.

The download page can be found in Library and IT’s section of the MyBucknell portal. Since users have logged in, scripts on the page determine the user’s eligibility. For example, Bucknell has a license with Microsoft for faculty and staff to purchase Office for home use at a reduced price. If students were to click on the Office download link, they would be met with a page informing them that the software package is not available for download because of eligibility restrictions.

For Bucknell-owned computers, staff and faculty looking to install software should continue to use Self-Service on their Macs and Run Advertised Programs on their PCs. This new software download page is designed only for personally-owned, non-work computers.

Look for the software download page in the Technology Support section on the left-side navigation of MyBucknell during the fall semester!

NEW TECHNOLOGY FROM ITEC

by Andy Famiglietti, Digital Scholarship Coordinator | andrew.famiglietti@bucknell.edu

ITEC is always trying out new technology, looking for the next advance that will transform learning and research! Here are some new tools we’re experimenting with, and which may be coming soon to a Bucknell lab or classroom near you.

• **Phantom Quadcopter:** The Phantom is a remote-controlled aerial vehicle equipped with a GoPro camera so it can shoot aerial footage just about anywhere! The quadcopter made its campus debut shooting overhead footage of the Library Unbound orientation event this fall. Future applications include capturing video footage for student documentary projects, and still images for research and teaching.

• **Google Glass:** Google’s Glass device is a wearable display with a camera that allows the user to access digital information and record images without looking away from real-world activities. ITEC personnel were selected as part of the Glass Explorer program, and received the prototype Glass device in July. ITEC is currently doing preliminary research into the potential implications of augmented reality devices like Glass for teaching and research. Two class demos are planned for this fall, with more to come in the spring.

• **Makerbot Replicator 2:** The Replicator is a 3D printer, which means that it can render digital 3D models as real plastic objects, often in as little as an hour or two. This capability to design and rapidly create objects, sometimes called “rapid prototyping,” has long been applied in the engineering fields, but ITEC is looking for ways to make use of this technology in other disciplines, including the humanities. Experiments are under way with creating replicas of archaeological artifacts and fossils based on existing catalogs of 3D scans made available by museums. In the future, Bucknell faculty working on research projects abroad may be able to scan items they are investigating, and have students and colleagues back home print out replica versions for further study and discussion.
NEW LIBRARY AND IT STAFF
by Carrie Pirmann, Social Sciences Librarian | carrie.pirmann@bucknell.edu

ANDY FAMIGLIETTI, Digital Scholarship Coordinator

Andy joined the ITEC team in June as one of two Digital Scholarship Coordinators. Within this new role, Andy is particularly interested in adapting open source tools to meet the needs of digital scholarship at Bucknell, and enabling more digital scholarship in the social sciences. Andy hails from Auburn, NY, and received his B.A. and M.A. in English from the State University of New York at Binghamton. He earned his Ph.D. in American Culture Studies from Bowling Green State University, and wrote his dissertation on the history and embodiment of Wikipedia. He was previously a Visiting Assistant Professor in the Emerging Media and Communications (EMAC) program at the University of Texas at Dallas, and prior to that, held a Marion L. Brittain Postdoctoral Fellowship at the Georgia Institute of Technology. At Bucknell, Andy is most excited about working with people outside of his previous fields of study and learning about new scholarly disciplines. Outside of work, he keeps his coding skills fresh by working on the Marca project, an open source software platform for composition classes. He also enjoys frequent bike rides on the Buffalo Valley Rail Trail.

DIANE JAKACKI, Digital Scholarship Coordinator

Diane joined the ITEC team in June as one of two Digital Scholarship Coordinators. Diane’s responsibilities in this role include outreach and networking, primarily with humanities departments, and introducing faculty to opportunities in the digital humanities through which they can extend the reach and scope of their research. She is most interested in interdisciplinary collaborations and “finding that spot where students can work with faculty on research projects.” Diane is originally from New Jersey, but has also lived in New England, California, and Canada. She earned her B.A. in English and History from Lafayette College; M.A. in English from the University of Toronto; and Ph.D. in English from the University of Waterloo, specializing in Early Modern Theatre and Multimedia Theory and Design. She held a Marion L. Brittain Postdoctoral Fellowship at the Georgia Institute of Technology, and prior to attending graduate school, worked at HBO for fifteen years doing program production and online content development. Diane says the aspects of working at Bucknell that excite her most are the opportunities “to work with faculty to build something that takes them in new directions or helps them better answer research questions” and “to grow students’ research capabilities using digital tools and methods.” In her free time, Diane enjoys golfing and traveling, especially to Maine.

HONORING BUCKNELL UNIVERSITY FACULTY AUTHORS

Each semester Library and Information Technology hosts a reception honoring recently published faculty authors for their outstanding contributions to scholarship. At the reception, a few of the faculty share their research experiences. Some faculty choose to talk about the specifics of their research, the challenges of the writing process, the role students played in their research, or simply the unique experience of conducting a research agenda at a place like Bucknell.

To see the list of our most recent, as well as previous authors, please visit: facultyauthors.blogs.bucknell.edu
LUYANG REN, GIS/Web Application Specialist

Luyang is the newest member of the ITEC team, coming on board in August to fill the newly created position of GIS/Web Application Specialist. Originally from Tangshan, China, she earned her B.E. in Geomatics Engineering at North China Institute of Science and Technology (NCIST), and an M.S. in Geographic Information Science for Development and Environment at Clark University. She enjoys learning about new technologies and became interested in GIS through a course she took as an undergraduate. During her studies at NCIST, she served as a group leader on a project to develop a campus GIS system. While pursuing her graduate degree at Clark University, she worked at Clark Labs as a software developer and GIS programmer on the IDRISI software project. Luyang says she enjoys the environment at Bucknell and is impressed by the number of faculty across various disciplines who are using GIS in their teaching and research. Outside of work, she enjoys watching movies, going to the gym, and traveling with friends.

AKSHAY PORE, Business Intelligence Analyst-Functional Architect

Akshay joined the Library and IT team in July as a Business Intelligence Analyst-Functional Architect working on Bucknell University Intelligence (BUI) project. Originally from Pune, India, he received his B.E. in Computer Engineering from Maharashtra Institute of Technology, University of Pune, and his M.S. in Computer Science from the University of Missouri. Prior to coming to Bucknell, Akshay worked as a business analyst at Envisage Information Systems. He has also worked as a business analyst and with data warehousing systems at DISH Network. He noted that being part of the BUI team provides him with a “huge opportunity to learn new skills” and that he enjoys working with a large range of departments and helping users with their reporting needs. In his free time, Akshay says he enjoys getting to know Lewisburg, and particularly likes the Market Street area. He also loves to travel, and counts Glen Canyon, Yellowstone National Park, Utah, and the island of Mauritius as some of his favorite places.

LIBRARY AND IT BY THE NUMBERS (2012-2013)

250 GB: data transferred on a typical day
102.76 Terabytes: data transferred during Bucknell vs. Butler NCAA Tournament Game
4,200: wireless devices on Bucknell network in a typical evening
12,453: resolved technology support calls
296: number of courses converted to Moodle from Blackboard
164,600: page views on Research by Subject Guides
2,192: reference questions
140: research consultations with students
241: information literacy sessions taught by librarians
4,405: number of students attending library instruction sessions
6,574: “Get It” interlibrary loan/acquisitions requests
297 (98 physical, 199 virtual; 172 Windows, 125 Linux): servers maintained/hosted in our data centers
332,001: billable long distance calls
1,048,575: external phone calls
Library and IT always has fantastic student employees, without whose work we couldn’t function. Here are some of our newest students, telling us about their positions!

Anthony Contarino ’14: My internship in ITEC is a critical component of my EDUC 425 class, and it serves as my culminating experience as an Education major. Through this internship, I hope to gain some working knowledge of how instructional technology is utilized on a college campus from the professionals who specialize in it, including information on both the challenges and benefits of working in such an environment.

Kasha Scott ’14: I am a part of the Undergraduate Executive Internship Program here at Bucknell. My role in Library and IT is to strengthen its social media presence, as well as to work on new initiatives with Enterprise Risk Management. I hope to learn more about the inner workings of the library, and help students realize the variety of resources available.

D.J. Magee ’17: For the 2013-14 school year, I am working as a Presidential Fellow with the Research Services department to increase its presence on campus. My goal is to make students more aware of the research resources available to them and to work closely with library staff to tailor these resources to student needs. I am excited to undertake a project that is predicated on reaching out to people and hope to broaden my communication and advertising skills during my time here.