THE JAMES B. HUNT, JR. LIBRARY. A LIBRARY FOR THE FUTURE: TODAY

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Abstract

Since opening in January 2013, the James B. Hunt, Jr. Library has been regarded as a library of the future. Seamlessly integrating technology with an abundance of inspiring and thought provoking study and research spaces, natural light, and sustainable features, Hunt has become a destination for thousands of visitors who want to see and experience how the library of the future looks today.

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Soaring over former farmland, the fivestory, glass-clad James B. Hunt, Jr. Library at North Carolina State University, USA demonstrates that research, teaching, and learning co-habit just as naturally with technology, as they do with monographs and microfilm. Known as "The Library of the Future" by students, scholars, and visitors, the Hunt (as it is referred to by students) has been featured in over 300 media pieces, been recognized in American Libraries' "2013 Library Design Showcase" and won numerous awards, including the prestigious 2013 "AIA/ALA Building Award" since it opened in January 2013. Visitors, more than 15,000 from dozens of countries, including Moldova, have made the trek to Raleigh, NC USA to be engaged and inspired by this library of the future.

Designed by Snohetta, the same firm that designed Norway's Oslo Opera House and the new library at Alexandria, Egypt, the 220,000 square foot building stands out on a campus that has seldom strayed from a tradition of neo-Georgian architecture. Inside, patrons are treated to panoramic views and natural light afforded by a 360 degree expanse of windows. From the outside, the building appears to be encased in aluminum as a result of the vertical blades that deflect heat and solar glare, and the ceramic frits that are embedded in the glass.

Visitors who enter via the groundfloor entrance come face-to-face with a massive yellow staircase - the first of four that wind their way from floor-to-floor. To one side is Robot Alley, an area where onlookers can gather in front of floor-toceiling windows and observe the library's ARS (automated retrieval system) in action. Dubbed the bookBot, over 1.5 Million items, mostly engineering and textiles related, are stored in over 18,000 stainless steel bins. When an item is selected, one of four robotic arms is automatically deployed to pull the correct bin, and deliver it to a second-floor workstation where a staff member retrieves, scans, and delivers the item to a self-checkout station in less than five minutes.



Hunt Library overlooking Lake Raleigh at dusk. ©Jeff Goldberg–Esto



The bookBot inside the first floor entrance. ©Jeff Goldberg–Esto

In use by nearly two dozen libraries in North America, the bookBot system takes up only one-ninth the space used by traditional shelving. Items stored in the bookBot are at least five years old and represent less than one third of the NCSU Libraries total collection. Nearly 40,000 books, including faculty publications and new acquisitions specific to engineering and textiles, are located on open shelving in reading rooms on the 2nd and 4th floors. And, the NCSU Libraries entire collection, even monographs encased in stainless steel, can be viewed on our proprietary Virtual Browse system.

On the second floor the expansive and light-filled Rain Garden Reading Room was designed for quiet study, contemplation or collaboration. This area is home to semi-circular book shelves, an art-wall painted in situ by Jose Parla, and an extensive and colorful collection of furniture. Selected by library management, Hunt Library boasts over 80 different styles of seating in over 115 colors. While eclectic style and durability were key to selection, the color palette was chosen to reflect that seen in the garden just beyond the windows.

This floor also features two of the building's five Christie Micro-tile walls: one located in the Immersion Theater, the other just above the Ask Us Center. The Ask Us Center is the central service point for the entire library. Staff members are encouraged to roam throughout the library, outfitted with mini-tablets and radios, to assist students and faculty at their workstations. In the Center, they assist with questions, locate reference librarians 24/7, and check out technology such as laptops and camcorders.

Immersion Theater users can choose from a variety of pre-programmed presentations including scientific research, art, and inspiration that can be projected onto the curved Micro-tile wall. The space can also be reserved by faculty and graduate students who might utilize the USB port and project content directly from their laptops.

A World of Technology

Yellow-tinted Roman steps, leading the way to the third and fourth floors, are portals to a technological wonderland an environment designed to encourage the library of the future – an inevitable collaboration of technology, teaching, learning and research. A GameLab on the third floor, complete with privacy glass and noise barriers, provides support for a degree in game development. Designed for classroom use, up to eight different game images can be projected from the "bridge" or game console onto a 21-foot Christie Micro-tile wall that doubles as a giant touch screen. When the room is not reserved, students are welcome to check-



The Rain Garden Reading Room

out controllers and games from the Ask Us Center for recreational purposes.

Collaborative study rooms, reservable in two-hour increments and available 24 hours a day, are located throughout the building, but are especially visible on floor three, where they surround the GameLab and Next Gen Learning Commons. Designed to accommodate four to fourteen students, each room features markable walls. and glass, flat screen projection, in-table or in-wall USB ports, wireless connectivity, and capabilities for teleconferencing. Larger rooms often have multiple flat screens and hanging microphones for large group teleconferences. Furnishings range from low-slung lounge chairs and beanbags to more traditional office style seating. Originally introduced at the D.H. Hill Library on the Main Campus, student demand for these spaces quickly exceeded availability. Utilizing space freed up by the bookBot allowed the libraries to expand the number of collaborative study rooms to nearly 100

Another set of Roman stairs leads you to the learning commons, additional collaborative study rooms, media and music production studios, a graduate student



Reservable study rooms surrounding the Next Gen Learning Commons



Inside the Creativity Studio at the James B. Hunt, Jr. Library

study commons (no faculty or undergrads allowed!), a Makerspace, and visualization studios outfitted with Christie projectors and speakers. In the Teaching and Visualization Lab users can project a single desktop image in a 270 degree format that wraps around three walls of the room. Next door, in the Creativity Studio, nearly every surface, including the floor, can be projected upon. Walls, which are markable, can be moved along ceiling tracks to create any size or shape of room.

A Room with a View

But, library patrons aren't drawn to the library solely for the technology. On the fifth floor, a quiet reading room, faculty research commons, and staff area are surrounded by a rooftop garden and the Skyline Terrace. At 88-feet, the Terrace is the highest point on Centennial Campus providing a panoramic view of Lake Raleigh and the downtown skyline. But, even if the surroundings appear deceptive, a quick look around at the ample number of electrical outlets, markable desktops, and whiteboards will quickly remind you that you are still within the Library of the Future... today.